

# Exhibit XX

**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA**

**Case No. 1:23-cv-00878-TDS-JEP**

DEMOCRACY NORTH CAROLINA;  
NORTH CAROLINA BLACK ALLIANCE;  
LEAGUE OF WOMEN VOTERS OF  
NORTH CAROLINA,

*Plaintiffs,*

vs.

ALAN HIRSCH, in his official capacity as  
CHAIR OF THE STATE BOARD OF  
ELECTIONS; JEFF CARMON III, in his  
official capacity as SECRETARY OF THE  
STATE BOARD OF ELECTIONS; STACY  
EGGERS IV, in his official capacity as  
MEMBER OF THE STATE BOARD OF  
ELECTIONS; KEVIN LEWIS, in his official  
capacity as MEMBER OF THE STATE  
BOARD OF ELECTIONS; SIOBHAN  
O'DUFFY MILLEN, in her official capacity  
as MEMBER OF THE STATE BOARD OF  
ELECTIONS; KAREN BRINSON BELL, in  
her official capacity as EXECUTIVE  
DIRECTOR OF THE STATE BOARD OF  
ELECTIONS; NORTH CAROLINA STATE  
BOARD OF ELECTIONS,

*Defendants.*

**EXPERT REPORT OF DR. KEVIN M. QUINN**

March 5, 2025

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## **I. BACKGROUND AND QUALIFICATIONS**

1. I have a Ph.D. and an A.M. in political science from Washington University in St. Louis as well as a B.A. in political science from the Johns Hopkins University.

2. I am the Charles Howard Candler Professor of Law and Professor of Quantitative Theory and Methods at Emory University.

3. Prior to joining the Emory faculty in 2023, I was a Professor of Political Science, Statistics (by courtesy), and Law (by courtesy) at the University of Michigan; a Professor of Law at the University of California, Berkeley; an Associate Professor and Assistant Professor of Government at Harvard University; and an Assistant Professor of Political Science and Adjunct Assistant Professor of Statistics at the University of Washington.

4. My general research areas are empirical legal studies and statistical methods for law and social science. This work has appeared in leading journals in the fields of Political Science and Statistics, such as the *American Journal of Political Science*, *Journal of Politics*, *Quarterly Journal of Political Science*, *Journal of Law, Economics, and Organization*, *Political Analysis*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society*, and the *Annals of Applied Statistics*, as well as leading law reviews such as the *Stanford Law Review*, *Columbia Law Review*, *California Law Review*, *University of Pennsylvania Law Review*, and the *Northwestern University Law Review*.

5. My research has been frequently supported by the National Science Foundation, and I am a three-time winner of the Harold Gosnell Prize for best paper in political methodology. From 2009 to 2012 I served as an Associate Editor at the *Journal of the American Statistical Association*. From 2017 to 2021 I served as a Co-Editor at the *Journal of Law, Economics, and Organization*. I am also an editorial board member at *Political Analysis* and the *Journal of Law and Courts*. I

served as President of the Society for Political Methodology from 2013 to 2015. I was elected a Fellow of the Society for Political Methodology in 2018.

6. In 2020 and 2021, I served as a testifying expert for the plaintiffs in *Jabari Holmes et al. v. Timothy K. Moore et al.*, No. 18-CVS-15292 (Wake Cnty. Sup. Ct.).

7. In 2015, I served as a testifying expert for the plaintiffs in *Currie, et al. v. State of North Carolina et al.*, No. 13-CVS-1419 (Orange Cnty. Sup. Ct.).

8. In 2012, I served as a testifying expert for the defendant-intervenors in *South Carolina v. United States, et al.*, No. 1:12-cv-203 (D.D.C.).

9. In 2011, I provided expert services to the Honorable Margaret B. Seymour under 5 U.S.C. § 3109 in the Voting Rights Act case *Levy, et al. v. Lexington Cnty. S.C. Sch. Dist. Three, et al.*, No. 3:03-cv-03093-MBS (D.S.C.).

10. A current copy of my full CV is attached as Appendix A to this report.

11. I am compensated at the rate of \$450 per hour. My compensation is not contingent on my opinions in, or the outcome of, this case.

## **II. STATEMENT OF INQUIRY**

12. Senate Bill 747 (“SB 747”), enacted on October 10, 2023, as 2023 N.C. Sess. Laws 140, changes North Carolina’s rules for voters who register and cast a ballot during the same-day voter registration period. Under those new rules, an eligible voter’s registration will be rejected and their ballot removed from the official count if a single mailer sent by the local county board of elections to verify the address listed on their registration is returned undeliverable between the time the voter registers and the close of business on the business day before county canvas. The relevant provisions of SB 747 are laid out in further detail *infra* ¶¶ 62-64, and 100.

13. I have been retained by the plaintiffs to examine how early voting and same-day registration have been utilized by North Carolinians in past elections, with special attention to how usage varies with age. Of particular interest are data on how North Carolina has conducted its mail verification notice procedure to verify the addresses provided on voter registration applications prior to the passage of SB 747 and data from elections in 2024 after the passage of SB 747 when the one-mailer verification system for same-day registrants included a notice-and-cure process. These data provide insight into the extent to which the changes to the mail verification process for same-day registrants required by SB 747 may or may not cause eligible North Carolina voters to be disenfranchised.

14. I reserve the right to update my opinion if and when additional data are available.

### **III. SUMMARY OF FINDINGS**

15. I find the following:

16. Early voting is widely used in both primary and general elections.

17. The use of early voting is becoming more common over time. 4.2 million North Carolinians voted early in the November 2024 general election—73.87% of the votes cast were early votes.

18. Over 100,000 North Carolinians voted via same-day registration in the 2016, 2020, and 2024 general elections, with over 130,000 same-day registrants in 2024.

19. Youth voters (voters under the age of 26) are overwhelmingly more likely to take advantage of same-day registration than are voters in other age groups, and youth voters have the highest number of same-day registrants in each election from 2016 to 2024 on an absolute basis. This is the case even though youth voters use early voting—the only period in which same-day registration is available—at lower rates than the voter population overall, and the overall number of youth registrants is smaller than that of any other age group.

20. For example, youth voters are always more than twice as likely to utilize same-day registration in a given election than voters overall; on occasion, such as in the 2018 primary election, youth voters used same-day registration at rates more than 10 times higher than voters overall.

21. In any given election, youth voters make up the largest age group of same-day registrants—typically between about 30% and 40% of same-day registrants. Put another way, in any given election, a randomly selected same-day registrant is more likely to be a member of the under-26 age group than any other age group.

22. The second mailer in the pre-SB-747 verification system played an important role in verifying voter registrations. Over the past 15 plus years, county boards sent nearly 110,000 second mailers after an initial failed mail verification and nearly 60,000 North Carolina voters relied on that second mail verification step to successfully register to vote.

23. Additionally, analysis of the voter file and provisional voter data indicates that many same-day registrants who fail mail verification are later casting provisional ballots or re-registering at the same address where they initially failed verification, providing evidence that these voters are still having their registrations denied erroneously.

24. Individuals under the age of 26 are the largest group of voters who had a second mailer sent or who rely on post-change-of-address forwarding (another method by which verification has occurred historically). Nearly half of the individuals who were verified on a second mailer were youth voters; and, since 2010, the second mailer was responsible for over 26,000 verifications of youth voter registrations. If the second mailer were not available, it is almost certain that these individuals would have failed verification and thus had their registration denied.

25. Those under 26 years of age are disproportionately more likely to fail the mail verification process than those in older age groups. The number of individuals under 26 with failed mail verifications would be even larger without the use of a second mailer given the rates at which individuals under 26 use that second mailer to verify.

26. Moreover, among individuals who live at high-density addresses (i.e., those with more than 25 attempted voter registrations), those who failed the first mailer are approximately 8 times more likely to reside at a college address (47.92% of those failing the first mailer at such addresses) than new registrants at such high-density addresses overall (6.00%).

27. Taken together, these facts indicate that the mail verification process is a relatively difficult process for youth voters to successfully navigate and that SB 747 is likely to exacerbate those difficulties.

28. The notice-and-cure process that was implemented for elections in 2024 was not effective for youth voters. The fraction of youth voters who successfully made use of the notice and cure process was lower than for any other age group. For example, 14% of youth voters successfully cured their registration in the 2024 general election compared to 30% of voters 66 and older who successfully cured their registrations.

29. Given the historical trends, SB 747 is likely to disenfranchise people who would have been able to successfully register and vote under the pre-SB-747 law. Because SB 747 will likely result in disproportionate numbers of failed voter registration verifications for youth voters—both relative to how those youth voters would have fared in the pre-SB-747 two-mailer verification process and compared to how other age groups will likely fare under SB 747—this impact will be most substantial for youth voters.



#### **IV. DATA AND METHODOLOGY**

30. The data I rely upon for this report comes from the North Carolina State Board of Elections (“SBE”). For many of the analyses, it is sufficient to use voter registration and turnout data that the State Board of Elections makes publicly available on its website. For other analyses—particularly those that investigate the mail verification process—it is necessary to use highly confidential data that State Board of Elections produced to the parties in this litigation during discovery.

31. To describe historical patterns in early voting and same-day registration, I used two different types of publicly available data from the State Board of Elections. First, I used voter file snapshots created at the time of each election that provide a full list of all voters at the time of that election, and I merged these with a voter history file, which indicates the method by which a voter cast a ballot in a particular election for all elections within the past 10 years. This allows me to report statistics regarding the prevalence of different methods of voting, including early voting, across numerous elections in the past decade. Second, I used publicly available absentee and provisional voting data files, with one published for each election, to further investigate voting via same-day registration and provisional ballots.

32. In addition to the publicly available data, I used highly confidential data that the State Board of Elections produced to plaintiffs, which included ten separate files. Two of these files contained the entire registration status history for 1) voters who had failed first-mailer verification and 2) voters who had been denied registration. The next two files contained personal information for voters who appeared in the two status files. Four status files contained all address change information for both the registration and mailing address separately for all voters in these two categories. Additionally, further demographic information was merged with these highly

confidential files from publicly available snapshots, as described above. By merging these files, using standard and accepted data merging techniques, I was able to reconstruct the entire registration and verification history for voters who had not been verified on the first mailer as well as those that were denied registration based on a lack of verification of address through the mail verification notice procedure. Two additional highly confidential files were produced in February of 2025. These files contained information on the ultimate verification status of individuals who failed the first mailer verification in March or November of 2024.

33. Appendix B provides a full list of all data sources I relied upon when writing this report.

34. Methodologically, I rely on standard methods of tabulating and displaying the State Board of Elections voter data discussed above. Since these data are population data, i.e., they are not a random sample from some larger population, there is no need for hypothesis tests or tests of statistical significance. One exception to this is in my analysis of some of the data in Section VII.C where a random sample was drawn. Here I do make use of an exact binomial test which is a scientifically accepted and widely used hypothesis test.<sup>1</sup>

## **V. BACKGROUND INFORMATION ON VOTING IN NORTH CAROLINA**

35. To vote in North Carolina, an individual must: be a U.S. Citizen; be 18 years of age or older; have resided in the precinct where they offer to vote for at least 30 days prior to election day; and not be serving a felony sentence, including any period of probation, post-release supervision, or parole.<sup>2</sup> Registration is also a prerequisite to voting.<sup>3</sup>

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<sup>1</sup> See MYLES HOLLANDER, DOUGLAS A. WOLFE, & ERIC CHICKEN, NONPARAMETRIC STATISTICAL METHODS 11–38 (3d ed. 2013).

<sup>2</sup> See N.C. CONST. art. VI, § 2; N.C.G.S. §§ 163-54, 163-55.

<sup>3</sup> N.C. CONST. art. VI, § 1; N.C.G.S. § 163-54.

### A. Early Voting

36. North Carolina voters may vote by mail, in-person on election day, or in-person prior to election day during the early voting period. The early voting period is defined by statute as “[n]ot earlier than the third Thursday before an election in which a voter seeks to vote and not later than 3:00 P.M. on the last Saturday before that election[.]”<sup>4</sup> During this seventeen-day early voting period, a voter may present at any authorized early voting site in the county where they reside and cast their ballot.

37. Early voting has been widely used by North Carolinians. Figure 1 below presents the total number of early votes in North Carolina primary and general elections from 2014 to 2024. Figure 2 displays the early votes in North Carolina elections as a percentage of the total votes cast in those same elections.

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<sup>4</sup> N.C.G.S. § 163-166.40(b). Prior to the passage of SB 747, ballots cast during the early voting period were considered “absentee ballots” and referred to as “one-stop voting.” *See generally* N.C.G.S. § 163-227.2 (recodified 2023 as § 163-166.40). For clarity’s sake, and because this statutory change and change in terminology are not at issue here, I adopt the terminology of SB 747 when referring to early voting.

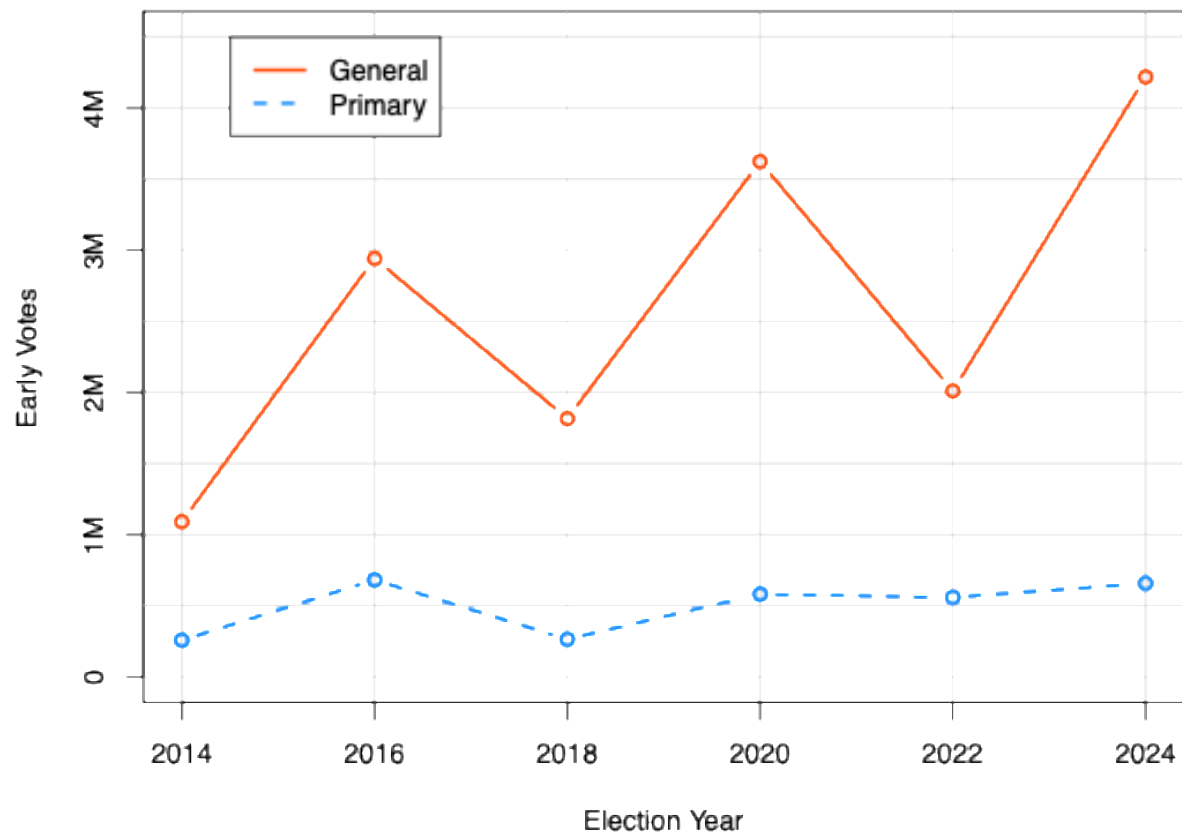


Figure 1. Total Early Votes by Election, 2014-2024. Tabulated from voter snapshots from each election date paired with the voter history file "ncvhis\_Statewide.txt".

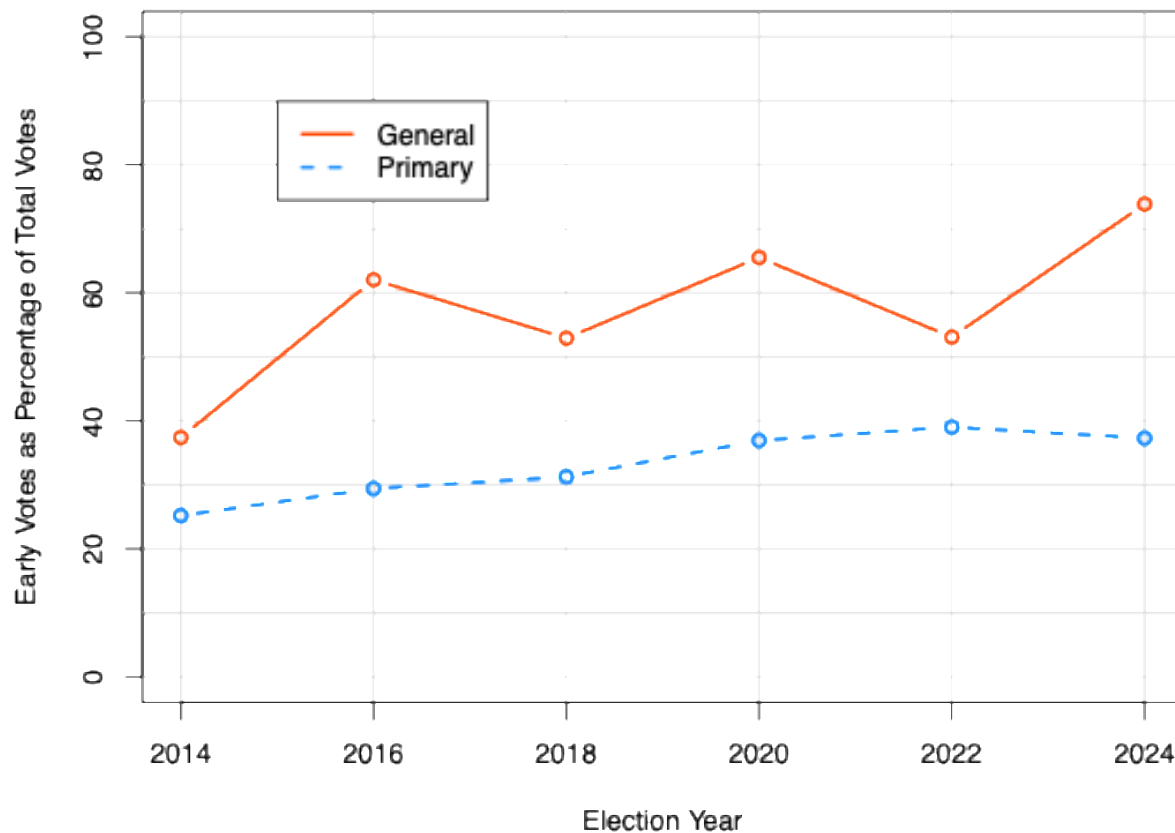


Figure 2. Early Votes as a Percentage of Total Votes Cast by Election. Tabulated from voter snapshots from each election date paired with the voter history file “ncvhis\_Statewide.txt”.

38. Several patterns are apparent in these data.

39. First, early voting is widely used in both primary and general elections. The number of early voters in each of the six primary elections from 2014 to 2024 ranges from above 250,000 (2014) to just over 680,000 (2016). In terms of the percentages, between 25% and nearly 40% of the votes cast in primaries are early votes.

40. Early voting is even more common in general elections. At the low end, just over 1 million North Carolinians voted early in the 2014 general election. At the high end, over 4.2 million people

voted early in the 2024 general election. In percentages, early votes comprise between 37% and over 73% of the total votes cast in North Carolina general elections.

41. Second, the data show that North Carolina voters are increasingly relying upon early voting as their method of voting.

42. Within primary elections the number of early voters increases from just over 250,000 in 2014 to just under 560,000 and 660,000 in 2022 and 2024 respectively. Looking at these numbers as a percentage of total votes cast in those elections, we get 25.20% in 2014 to 39.03% and 37.29% in 2022 and 2024 respectively.

43. Within presidential general elections the number of early voters increases from just under 3 million (2016) to just over 3.5 million (2020) to over 4.2 million (2024). As a percentage of those who voted, these numbers correspond to 62.05%, 65.52%, and 73.87% of those who voted in 2016, 2020, and 2024 respectively. The most recent general election in 2024 had the highest-ever proportion of votes cast as early votes in North Carolina. Within midterm general elections the number of early voters approximately doubles from just over 1 million in 2014 (which corresponds to 37.39% of those who voted) to just over 2 million in 2022 (which corresponds to 53.09% of those who voted).

44. Finally, the data also show that within general elections early voting is more widely used in presidential general elections (2016, 2020, and 2024) than in midterm general elections (2014, 2018, and 2022), with nearly 3 million early votes in 2016, over 3.5 million in 2020, and over 4.2 million in 2024 compared to between approximately 1 and 2 million in the midterm general elections. In terms of percentages of total votes cast in each election this corresponds to 62.05% of votes cast in 2016, 65.52% of votes cast in 2020, and 73.87% of votes cast in 2024 compared to 37.39% of votes cast in 2014, 52.93% of votes cast in 2018, and 53.09% of votes cast in 2022.

## **B. Voter Registration—including Same-Day Registration**

45. Individuals who are eligible to vote in North Carolina can register in person, by mail, or through an online portal through the North Carolina Division of Motor Vehicles (“DMV”).<sup>5</sup> Regardless of the method used, an individual seeking to register to vote must complete and submit a voter registration application form.

46. The voter registration form requires the registrant to attest under oath to their eligibility to vote and to provide their name, date of birth, residential address, a mailing address if different from their residential address or if they do not receive mail at their residential address, and either their North Carolina driver’s license / DMV ID number or the last four digits of their social security number (or indicate that they have neither).<sup>6</sup> Generally speaking, a completed registration form must be submitted at least 25 days prior to election day for it to be valid for that election.<sup>7</sup>

47. North Carolina also allows for same-day voter registration during the early voting period. The law of same-day voter registration that was in place prior to the enactment of SB 747 was originally codified at N.C.G.S. § 163-82.6A, but, due to a separate legal challenge, appears as an appendix to the North Carolina State Board of Elections Numbered Memo 2016-15.<sup>8</sup>

48. Under this law prior to the passage of SB 747, an eligible voter could register and vote at an early voting site by completing and signing the North Carolina voter registration application

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<sup>5</sup> *How to Register*, N.C. State Bd. of Elections, <https://www.ncsbe.gov/registering/how-register> (last visited March 3, 2025).

<sup>6</sup> N.C. State Bd. of Elections, North Carolina Voter Registration Application, [https://s3.amazonaws.com/dl.ncsbe.gov/Voter\\_Registration/NCVoterRegForm\\_06W.pdf](https://s3.amazonaws.com/dl.ncsbe.gov/Voter_Registration/NCVoterRegForm_06W.pdf) (last visited March 3, 2025).

<sup>7</sup> *Voter Registration Deadlines*, N.C. State Bd. of Elections, <https://www.ncsbe.gov/registering/how-register/voter-registration-deadlines> (last visited March 3, 2025); *see also* N.C.G.S. § 163-82.6(d).

<sup>8</sup> N.C. State Bd. of Elections, Numbered Memo 2016-15 at 1, 4 (2016), [https://s3.amazonaws.com/dl.ncsbe.gov/sboe/numbermemo/2016/Numbered\\_Memo\\_2016-15\\_Same-Day\\_Registration.pdf](https://s3.amazonaws.com/dl.ncsbe.gov/sboe/numbermemo/2016/Numbered_Memo_2016-15_Same-Day_Registration.pdf).

and providing proof of residence through the presentation of certain approved documents showing the voter's current name and current residential address.<sup>9</sup>

49. A voter who registers using same-day registration at an early voting site was then permitted to immediately vote a retrievable ballot at the early voting site after registering.<sup>10</sup>

50. Figure 3 below displays the number of votes cast by voters who registered via same-day registration in elections from the 2016 general election<sup>11</sup> to the 2024 general election. The vertical axis in this figure is the number of votes cast by voters who registered via same-day registration in that election.

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<sup>9</sup> *Id.* at 4.

<sup>10</sup> *Id.*

<sup>11</sup> Though same-day registration was enacted in North Carolina in 2007, the public-facing State Board of Elections data I rely on for the analysis of same-day registration does not include an indicator for same-day registration until November 11, 2016. See *absentee\_layout.txt*, N.C. State Bd. of Elections, [https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/layout\\_absentee.txt](https://s3.amazonaws.com/dl.ncsbe.gov/ENRS/layout_absentee.txt) (last visited March 3, 2025). As a result, my analysis of same-day registration begins with the 2016 general election.



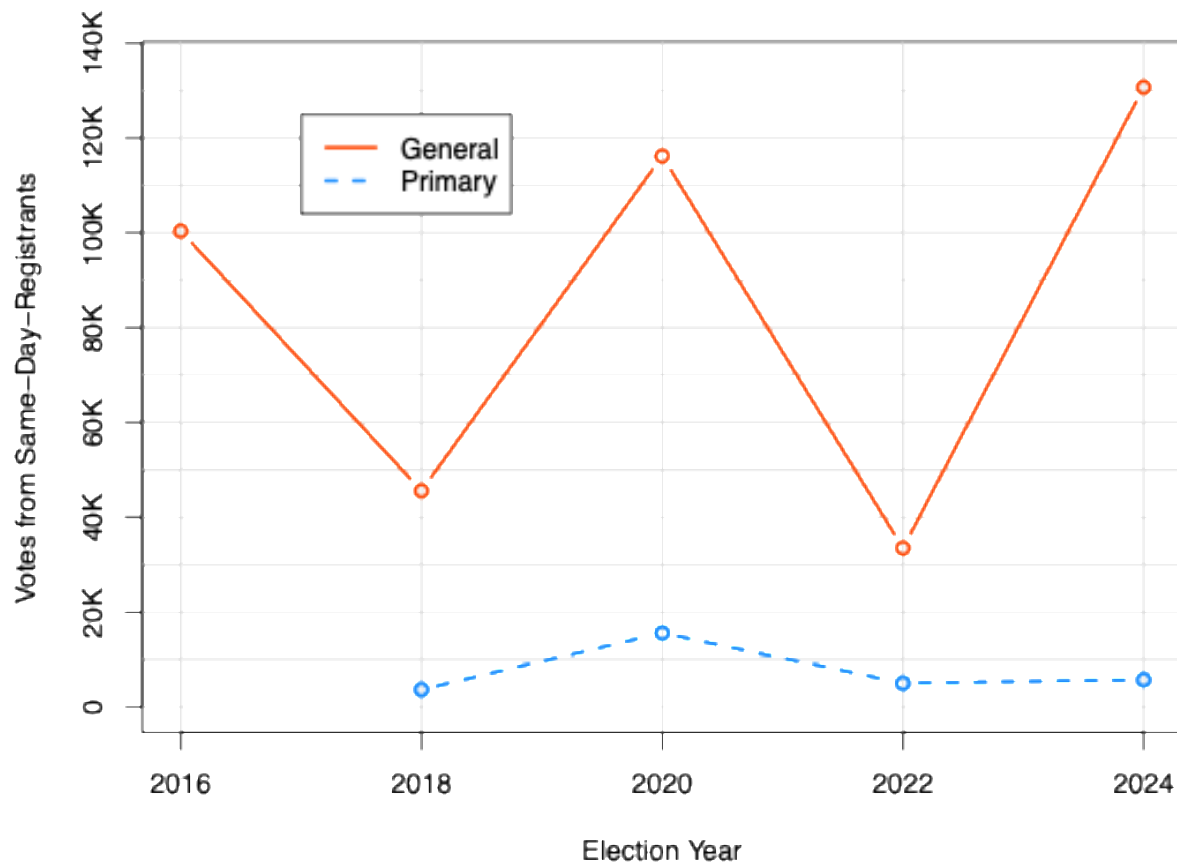


Figure 3. *Votes by Same-Day Registrants, 2016-2024.* The same-day registrant votes in a given election are those cast by voters who utilized same-day registration in that election. Tabulated from absentee files for each election using SDR indicator variable.

51. Looking at Figure 3 we see that same-day registration is most prevalent in general elections—particularly presidential-year general elections. In the 2016 general election over 100,000 individuals voted utilizing same-day registration, while in the 2020 general election, over 115,000 did so; and in the 2024 general election over 130,000 utilized same-day registration. In midterm general elections (2018 and 2022), the number of same-day registrant votes were

approximately 45,000 and 33,000. Primary elections, by comparison, show a significantly smaller number of same-day registrants in elections from 2018 to 2024.<sup>12</sup>

52. Figure 4 below provides a sense of the cumulative importance of same-day registration from the 2016 general election to the 2024 general election. Status as a same-day registrant is cumulative in this figure in that votes cast by voters in a given election who registered via same-day registration in that election *or an earlier election* are counted in the numerator. The denominator consists of all votes cast in a given election.

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<sup>12</sup> Same-day registration was not allowed during the 2016 primary because of election law changes in House Bill 589 (S.L. 2013-381) that were later invalidated by the Fourth Circuit Court of Appeals. *See generally* Numbered Memo 2016-15, *supra* n.8, at 1. Accordingly, there is no same-day registration data to report from the 2016 primary.

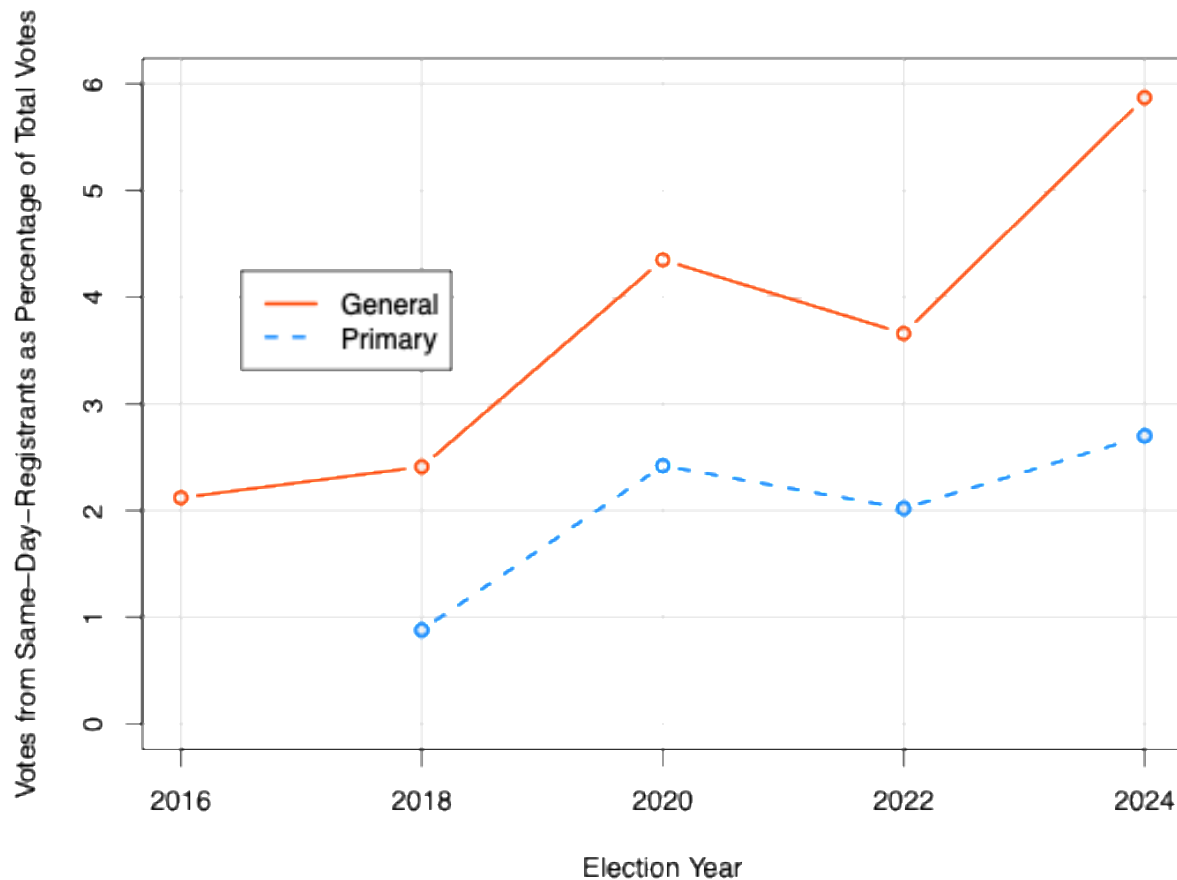


Figure 4. Votes by Same-Day Registrants as a Percentage of Total Votes Cast by Election. The same-day registrant votes in a given election are those cast by voters who utilized same-day registration in that election or an earlier election. Data are from absentee files and snapshot files from each election along with the voter history file “ncvhis\_Statewide.txt”.

53. From Figure 4 we can see that same-day registrants are making up an increasingly large fraction of those registrants who turn out to vote. The 2016 general election, for example, had just over 2% of the total votes cast coming from same-day registrants. In just four years, that percentage more than doubled to over 4% in the 2020 general election. In the next presidential general election (2024), that percentage increased to nearly 6%. A similar increase over time in the percentage of votes coming from same-day registrants is seen within primary elections.

54. Figure 4 also reveals that same-day registrants make up a larger share of the total vote in general elections than in same-year primary elections.

55. To summarize, same-day registrants are most prevalent in general elections. This is especially the case in presidential-year general elections when there have been over 100,000 same-day registrants per election. Same-day registration is much less likely in primaries—both in terms of raw numbers of same-day registrants and as a percentage of voters in that election. Further, voters whose registrations came through the same-day registration system are becoming an increasingly large percentage of North Carolina voters—this is especially true in general elections.

### **C. The Mail Verification Process**

56. In North Carolina, an important part of voter registration—both standard registration and same-day registration—is the process by which the voter’s address is verified.

57. As noted above, a registrant is required to attest to their eligibility by completing a voter registration form and, in some cases, providing documentary proof of their residential address. N.C.G.S. §§ 163-82.4, 163-82.6B(b)(2), 163-166.12. Registration forms are then sent to county boards of elections, which take steps to verify the qualifications and addresses of the registrants.

58. Before SB 747, the process of verifying every voter’s address involved two rounds of notices sent by non-forwardable mail to the address provided on a voter’s registration form. N.C.G.S. § 163-82.7(c)–(e).<sup>13</sup> Only if both notices were returned as undeliverable would a registrant fail mail verification and have their registration application denied. *Id.* § 163-82.7(e)–(f).

59. In cases where an election occurred before the mail verification process was completed, a same-day registrant’s ballot was still counted. N.C.G.S. § 163-82.7(g)(1).

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<sup>13</sup> Notices are sent to a registrant’s mailing address if different from the listed residential address. Otherwise, the notices are sent to the list residential address. *See* North Carolina State Board of Elections, *North Carolina Voter Registration List Maintenance* (Aug. 21, 2024), at 13, [https://s3.amazonaws.com/dl.ncsbe.gov/Voter\\_Registration/North\\_Carolina\\_List\\_Maintenance\\_Policy\\_2024\\_08\\_21.pdf](https://s3.amazonaws.com/dl.ncsbe.gov/Voter_Registration/North_Carolina_List_Maintenance_Policy_2024_08_21.pdf).

60. If a same-day registrant failed mail verification after casting their ballot but before the ballot was actually counted, the ballot could be challenged. But the challenged voter was entitled to notice and a hearing, the outcome of which would determine whether their vote would be counted. N.C.G.S. §§ 163-82.7(g)(2), 163-89(e).<sup>14</sup>

61. If a voter failed mail verification after their vote was counted, their ballot was not disturbed. N.C.G.S. § 163-82.7(g)(3).

62. SB 747 changed the mail-verification process. Same-day registrants are now sent only one notice by non-forwardable mail. If that notice is returned as undeliverable “before the close of business on the business day before canvass,” the voter will not be registered, and their ballot will not be counted. SB 747 § 10(a).

63. SB 747 removed the requirement that county boards provide notice and an opportunity to be heard before denying a voter’s registration and canceling their ballot. SB 747 § 10(a). Instead, SB 747 dictates that the registrant’s ballot will be removed automatically from the count. *Id.*

64. The State Board of Elections issued Numbered Memo 2023-05,<sup>15</sup> in response to a preliminary injunction issued by the Court, in a separate lawsuit challenging SB 747. I understand that Numbered Memo 2023-05, as revised, currently provides a notice-and-cure process if the single mail-verification mailer is returned as undeliverable.

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<sup>14</sup> See also N.C. State Bd. of Elections, Numbered Memo 2022-05 at 3–4, [https://s3.amazonaws.com/dl.ncsbe.gov/sboe/numbertmemo/2022/Numbered%20Memo%202022-05\\_Absentee%20Voter%20Challenges%20by%20County%20Board.pdf](https://s3.amazonaws.com/dl.ncsbe.gov/sboe/numbertmemo/2022/Numbered%20Memo%202022-05_Absentee%20Voter%20Challenges%20by%20County%20Board.pdf) (last updated Dec. 15, 2023).

<sup>15</sup> N.C. State Bd. of Elections, Numbered Memo 2023-05, <https://s3.amazonaws.com/dl.ncsbe.gov/sboe/numbertmemo/2023/Numbered%20Memo%202023-05%20Same-Day%20Registration.pdf> (last updated Jan. 29, 2024).

## **VI. YOUTH VOTING IN NORTH CAROLINA**

65. In this section I describe several empirical patterns that relate to youth voting in North Carolina. I define “youth voters” to be voters who are less than 26 years of age.

66. I begin with some basic descriptive facts. I then discuss youth early voting patterns followed by youth same-day registration patterns.

### **A. Basic Descriptive Facts**

67. Analysis of recent voter registration and turnout data demonstrates that youth voters are growing as a voting bloc within the North Carolina electorate and exhibit particularly strong voter activity in presidential election years.

68. Figures 5 and 6 below each display the age composition of North Carolina registered voters at the time of general elections from 2014 to 2024 partitioned into six age ranges: under 26, 26-35, 36-45, 46-55, 56-65, and 66 and older. These ranges roughly correspond to the age ranges used by the State Board of Elections to report voter demographics in summary form—they typically use only four ranges with 18-25, 26-40, 41-65, and 66 and older. I use six age ranges for greater granularity. In addition, I use four equally-sized 10-year bins for the individuals between 26 and 65 years of age, whereas the State Board of Elections uses one 15-year bin (26-40) and one 25-year bin (41-65). The use of equally sized bins for these middle categories aids comparability. I have kept the extreme bins at under 26 and 66+ as these are substantively meaningful age ranges corresponding to young adults of college or professional school age and individuals of retirement age respectively. Finally, because full dates of birth were not available in the files I had access to, age is calculated as the year of an election minus year of birth.

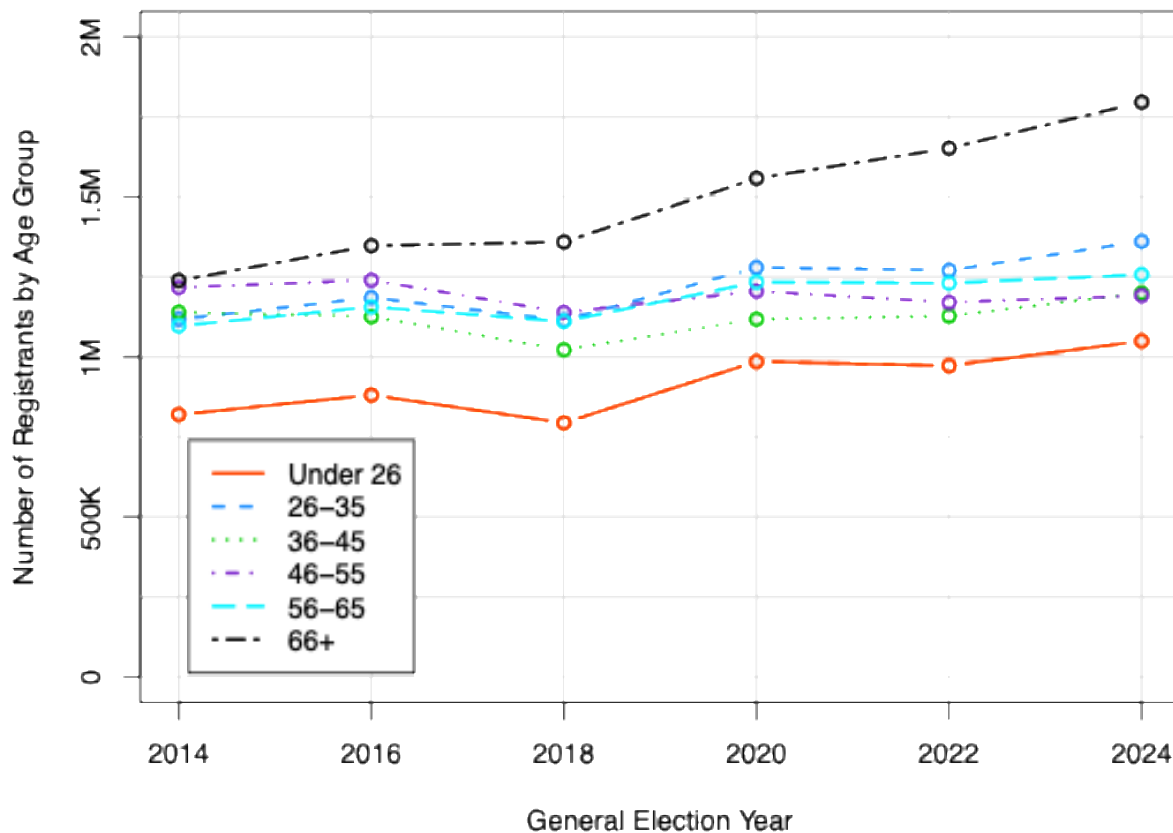


Figure 5. North Carolina Registrants by Age and General Election, 2014-2024. Tabulated from voter snapshot files from each general election date.

69. Figure 5, which plots the overall number of registrants in each age range, shows that while youth voters are the smallest age group (at least in part due to the smaller eight-year age range), they are a growing segment of the electorate. From 2014 to 2024 youth voters increased by 230,122—which is a 28% increase from 819,408 in 2014 to 1,049,530 in 2024. Youth voters are also increasing as a share of overall registrants.

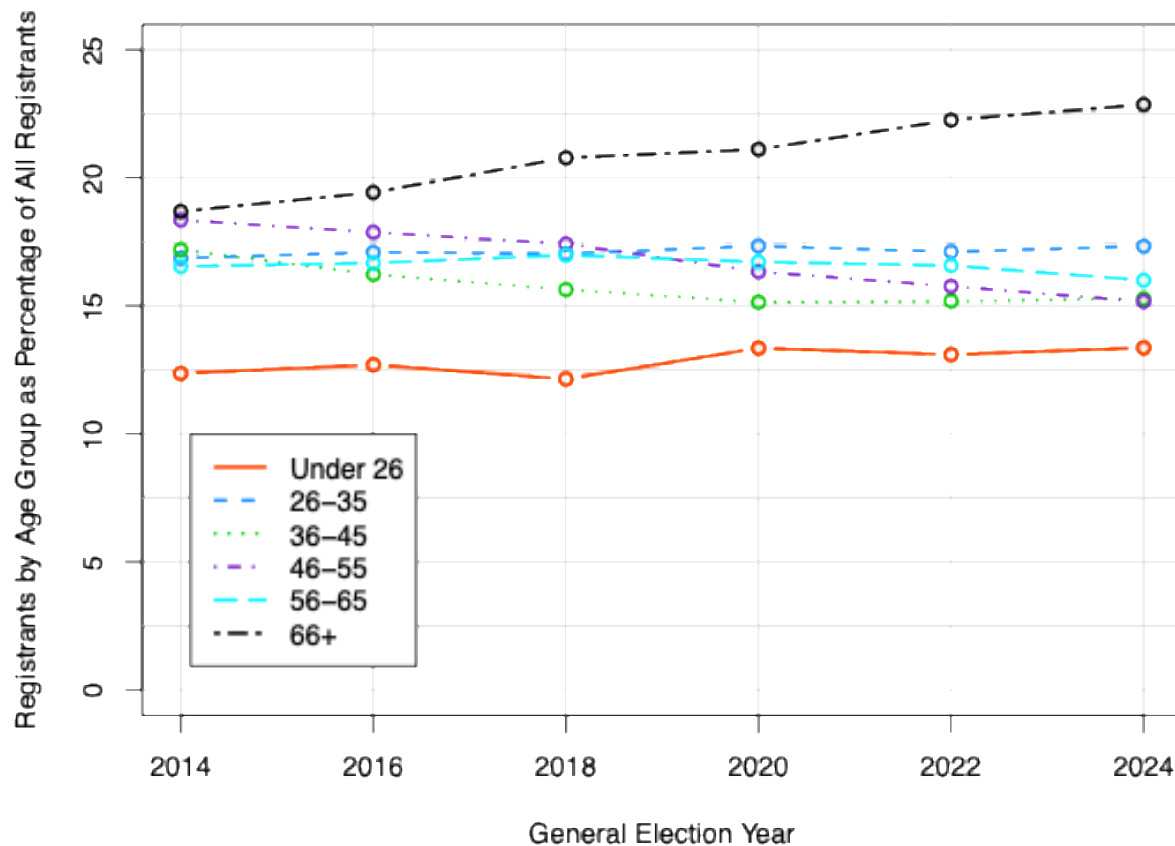


Figure 6. Age Composition of Registered North Carolina Voters, 2014-2024. Each age-group-specific point corresponds to the number of registered voters in that age group at that general election as a percentage of all registered voters at that general election. Tabulated from voter snapshot files from each general election date.

70. Figure 6 displays the number of registrants in each age category as a percentage of all registrants at that time and shows that the fraction of registrants who are youth voters has increased over time—from 12.36% in the 2014 general election to 13.36% in the 2024 general election.

71. Registration is only part of the story. It is also instructive to examine voter turnout within the under 26-year-old age group to understand the recent voting patterns of that age group.

72. Figure 7 displays the number of youth voters in each election from 2014 to 2024.



73. Figure 8 expresses youth turnout from 2014 to 2024 as a percentage of youth registrants in those elections.

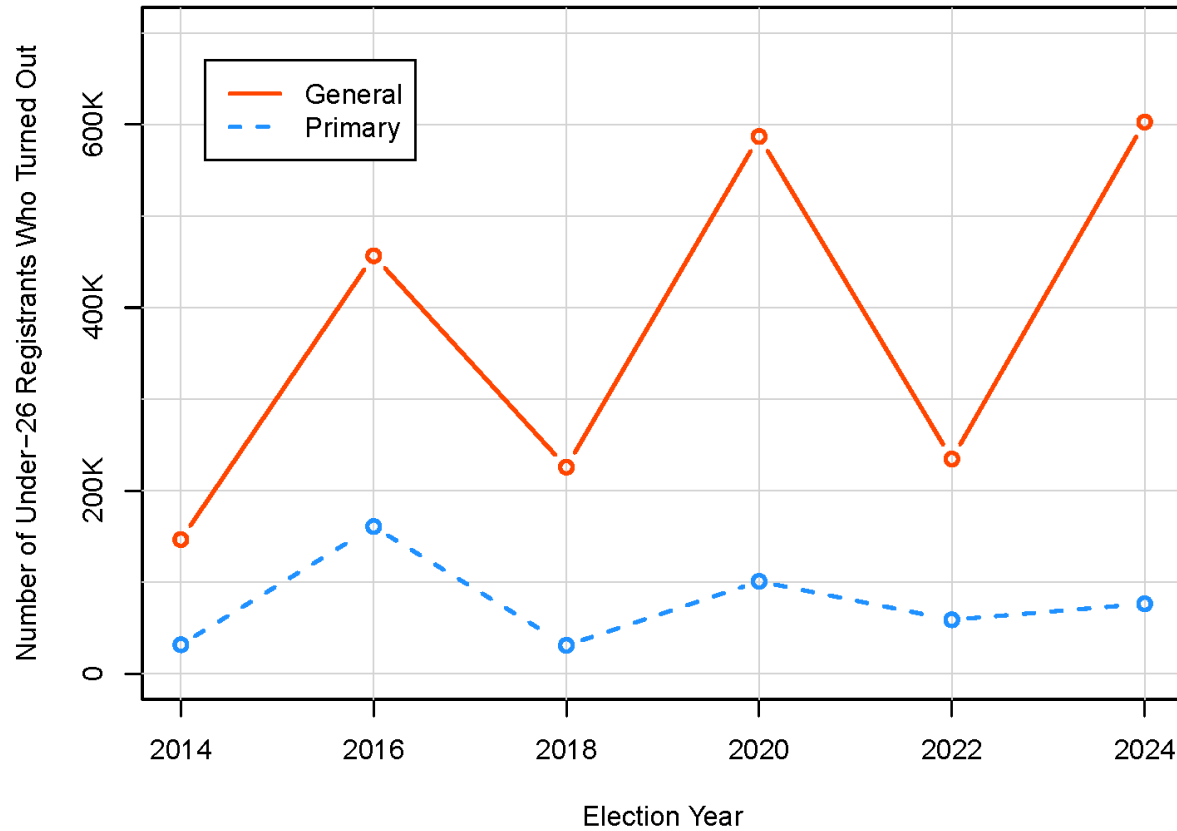


Figure 7. Number of Under-26-Year-Old North Carolina Voters, 2014-2024. Tabulated from voter snapshot files at each election date paired with voter history “ncvhis\_Statewide.txt” file.

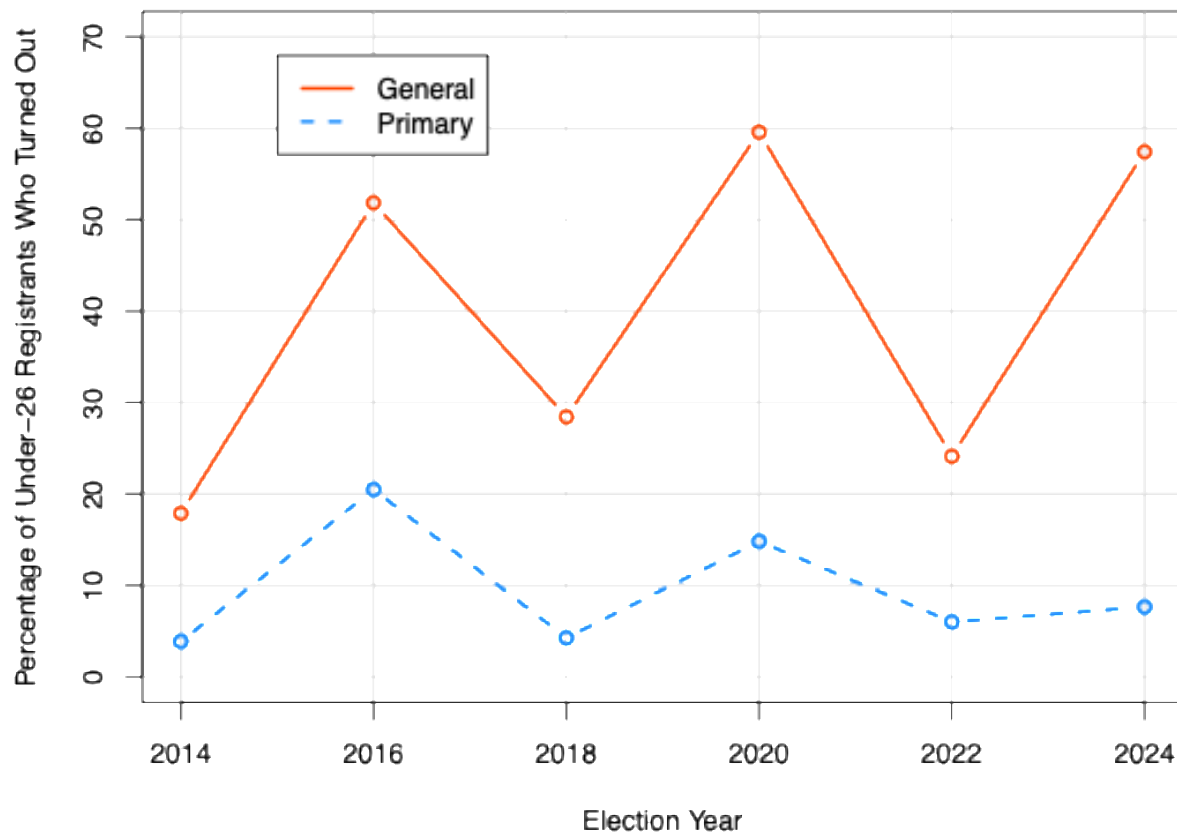


Figure 8. Youth Turnout in North Carolina General Elections and Primary Elections, 2014-2024. Each point corresponds to the percentage of registered under-26-year-old voters who turned out to vote in that election. Tabulated from voter snapshot files at each election date paired with voter history “nevhis\_Statewide.txt” file.

74. Several things are apparent from these two figures.

75. First, youth turnout is highest in presidential general elections (between approximately 450,000 and 600,000) and lowest in midterm primary elections (between approximately 30,000 and 60,000). Youth turnout is increasing in presidential general elections and midterm general elections, but relatively flat in primary elections.

76. Second, youth voters are much more likely to turn out in general elections than primary elections. General election youth turnout is always at least 2.5 times the percentage of primary

election youth turnout (in 2016 it was 2.5 to 1, i.e. 51.85% to 20.50%). At the other extreme, general election youth turnout was more than 7.5 times larger than primary election youth turnout in 2024 (57.43% to 7.64%).

77. Third, youth turnout as a percentage of youth registrants is higher in general election years than in midterm election years. This is especially the case within presidential elections. Youth turnout in midterm general elections was never above 30% and in one year (2014) was below 20%. In presidential years, general election youth turnout was above 50% (and nearly 60% in 2020 and 2024). Youth turnout is also higher in presidential election year primary elections than in midterm primary elections.

78. An important takeaway is that youth turnout in primary elections is fundamentally different than youth turnout in general elections. This is true in terms of both the overall levels of turnout as well as the patterns of change over time.

## **B. Early Voting**

79. Youth voting during the early voting period is of interest because same-day registration is only available in North Carolina at early voting sites during the early voting period.

80. Table 1 below presents the total number of votes cast during the early voting period by age group in each election from 2014 to 2024 and Table 2 presents the votes cast during the early voting period as a percentage of all votes cast by the same age group in each of those elections. The “Total Early Votes” column in Table 1 gives the total number of early votes cast in each election. The “Overall” column in Table 2 presents early votes as a percentage of all votes cast in the election.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>	<b>Total Early Votes</b>
<b>2014 primary</b>	7090	12516	22233	38264	67364	110156	257623
<b>2014 general</b>	38748	68246	117808	202340	287950	376406	1091498
<b>2016 primary</b>	51514	53595	65000	106623	164930	240085	681747
<b>2016 general</b>	253011	354463	434883	569470	616868	713127	2941822
<b>2018 primary</b>	9850	16008	23488	38948	62160	114674	265128
<b>2018 general</b>	100799	161969	216998	330012	424397	581867	1816042
<b>2020 primary</b>	35834	45519	53057	80193	133184	233562	581349
<b>2020 general</b>	371773	484783	547103	683367	720347	815303	3622676
<b>2022 primary</b>	19673	27914	41504	67678	126258	275765	558792
<b>2022 general</b>	100979	156049	212018	318489	463414	759170	2010119
<b>2024 primary</b>	22219	30145	44775	74139	145207	341622	658107
<b>2024 general</b>	401801	524833	572640	690334	820836	1207485	4217929

Table 1. Total Votes Cast in that Election in that Age Group via Early Voting. The 2016 general election and after includes same-day registration within early voting. Tabulated from voter snapshot files at each election date paired with voter history “nevhis\_Statewide.txt” file.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>	<b>Overall</b>
<b>2014 primary</b>	22.44%	21.49%	19.70%	20.50%	25.83%	29.59%	<b>25.20%</b>
<b>2014 general</b>	26.44%	24.14%	26.53%	33.59%	43.36%	48.29%	<b>37.39%</b>
<b>2016 primary</b>	32.05%	22.48%	20.36%	24.25%	31.90%	37.36%	<b>29.41%</b>
<b>2016 general</b>	55.41%	54.53%	57.62%	62.08%	67.33%	68.19%	<b>62.05%</b>
<b>2018 primary</b>	31.82%	27.25%	25.44%	27.32%	30.92%	35.57%	<b>31.27%</b>
<b>2018 general</b>	44.66%	42.06%	43.97%	49.97%	57.52%	62.67%	<b>52.93%</b>
<b>2020 primary</b>	35.53%	29.33%	27.42%	30.66%	38.00%	45.56%	<b>36.93%</b>
<b>2020 general</b>	63.35%	62.04%	65.93%	69.93%	69.01%	62.23%	<b>65.52%</b>
<b>2022 primary</b>	33.42%	30.94%	28.88%	31.30%	38.23%	46.56%	<b>39.03%</b>
<b>2022 general</b>	43.05%	40.28%	41.55%	48.12%	57.02%	64.38%	<b>53.09%</b>
<b>2024 primary</b>	29.09%	25.75%	25.06%	28.16%	36.46%	46.72%	<b>37.29%</b>
<b>2024 general</b>	66.66%	66.49%	67.54%	73.80%	79.05%	80.72%	<b>73.87%</b>

Table 2. Percent of Total Votes Cast in that Election in that Age Group via Early Voting. The 2016 general election and after includes same-day registration within early voting. Tabulated from voter snapshot files at each election date paired with voter history “nevhis\_Statewide.txt” file.

81. The data shows that older voters use early voting most frequently, while voters between the ages of 26 and 45 years of age use it the least. Usage of early voting among youth voters falls

between these two extremes, but only twice rises above the average percentage of voters (in the 2016 and 2018 primaries).

82. As is the case in other age groups (and overall), youth voters are more likely to use early voting in general elections than in primary elections, and they are most likely to use early voting in presidential general elections.

### C. Same-Day Registration

83. I next examine same-day registration within the same age groups.

84. Table 3 below presents the number of total votes within each age group in primary and general elections from 2016 to 2024 that were cast after utilizing same-day registration in that specified election.<sup>16</sup> Table 4 displays those same-day registrant votes as a percentage of all votes in that election by any method.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>	<b>Overall</b>
<b>2016 general</b>	32062	22561	16479	13942	9333	5991	100368
<b>2018 primary</b>	1416	610	406	406	405	398	3641
<b>2018 general</b>	14918	10004	6103	5792	4889	3886	45592
<b>2020 primary</b>	6466	3224	1505	1277	1540	1574	15586
<b>2020 general</b>	31635	24590	18524	17389	14157	9878	116173
<b>2022 primary</b>	1445	895	541	484	705	929	4999
<b>2022 general</b>	10112	6890	4111	3874	4307	4190	33484
<b>2024 primary</b>	1981	842	542	519	697	1125	5706
<b>2024 general</b>	42139	30745	18562	14804	13362	11083	130695

*Table 3. Total Votes Cast via Same-Day Registration in that Election by Age Group.* Tabulated from the SDR indicator variable in the absentee files for each election.

<sup>16</sup> I am taking the number of votes cast by same-day registrants in a particular election to be the total number of individuals with the SDR flag in the absentee voter file for that election.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>	<b>Overall</b>
<b>2016 general</b>	7.02%	3.47%	2.18%	1.52%	1.02%	0.57%	<b>2.12%</b>
<b>2018 primary</b>	4.57%	1.04%	0.44%	0.28%	0.20%	0.12%	<b>0.43%</b>
<b>2018 general</b>	6.61%	2.60%	1.24%	0.88%	0.66%	0.42%	<b>1.33%</b>
<b>2020 primary</b>	6.41%	2.08%	0.78%	0.49%	0.44%	0.31%	<b>0.99%</b>
<b>2020 general</b>	5.39%	3.15%	2.23%	1.78%	1.36%	0.75%	<b>2.10%</b>
<b>2022 primary</b>	2.45%	0.99%	0.38%	0.22%	0.21%	0.16%	<b>0.35%</b>
<b>2022 general</b>	4.31%	1.78%	0.81%	0.59%	0.53%	0.36%	<b>0.88%</b>
<b>2024 primary</b>	2.59%	0.72%	0.30%	0.20%	0.18%	0.15%	<b>0.32%</b>
<b>2024 general</b>	6.99%	3.90%	2.19%	1.58%	1.29%	0.74%	<b>2.29%</b>

*Table 4. Percent of Total Votes Cast in that Election in that Age Group via Same-Day Registration.* Tabulated from absentee files for each election and voter snapshot files for each election paired with the voter history “ncvhis\_Statewide.txt” file.

85. Looking at these tables, we see that youth voters are overwhelmingly more likely to take advantage of same-day registration than are voters in other age groups and have the highest number of same-day registrants in each election environment on an absolute basis. This is the case even though youth voters use early voting—the period in which same-day registration is available—at lower rates than the voter population overall.

86. Comparing the same-day registration percentages for youth voters to the overall percentages, we see that youth voters are always more than twice as likely to utilize same-day registration than voters overall (see, for example, 5.39% to 2.10% in the 2020 general election) and on occasion youth voters used same-day registration at rates more than 10 times higher than voters overall, such as in the 2018 primary election (4.57% to 0.43%).

87. The age group with the closest degree of same-day registration usage is the 26-35 range. Even there, youth voters are always more than 1.7 times more likely to utilize early voting (2020 general election with 5.39% to 3.15%, 2024 general election with 6.99% to 3.90%). In other elections, youth voters are at least twice as likely as 26- to 35-year-olds to use early voting and as much as 4 times more likely to use early voting (2018 primary election with 4.57% to 1.04%).

88. I next examine the age distribution of same-day registrants within elections from 2016 to 2024 by looking at the number of same-day registrants in that age group and election as a percentage of all same-day registrants in that election. In other words, I take the data in Table 3 and convert those data to percentages. Table 5 presents this information. Each row of Table 5 corresponds to an election and each column corresponds to one of the six age groups used throughout this report. Table 5 allows one to examine the age distribution of same-day registrants in a given election.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>
<b>2016 general</b>	31.94%	22.48%	16.42%	13.89%	9.30%	5.97%
<b>2018 primary</b>	38.89%	16.75%	11.15%	11.15%	11.12%	10.93%
<b>2018 general</b>	32.72%	21.94%	13.39%	12.70%	10.72%	8.52%
<b>2020 primary</b>	41.49%	20.69%	9.66%	8.19%	9.88%	10.10%
<b>2020 general</b>	27.23%	21.17%	15.95%	14.97%	12.19%	8.50%
<b>2022 primary</b>	28.91%	17.90%	10.82%	9.68%	14.10%	18.58%
<b>2022 general</b>	30.20%	20.58%	12.28%	11.57%	12.86%	12.51%
<b>2024 primary</b>	34.72%	14.76%	9.50%	9.10%	12.22%	19.72%
<b>2024 general</b>	32.24%	23.52%	14.20%	11.33%	10.22%	8.48%

*Table 5. Voters in Each Age Group Who Registered and Voted in a Given Election via Same-Day Registration as a Percentage of Same-Day-Registration Voters in that Election.* Tabulated from absentee files for each election and the SDR indicator variable.

89. Looking at Table 5, we see that in any given election, youth voters make up the largest age group of same-day registrants—typically between about 30% and 40% of same-day registrants. Put another way, in any given election, a randomly selected same-day registrant is more likely to be a member of the Under 26 age group than any other age group.

90. The data in Table 5 are depicted graphically in Figures 9 and 10 below. These figures simply provide a clear visualization of the numbers in Table 5 and support the conclusion that same-day registrants are more likely to be in the Under 26 age group than any other age group.

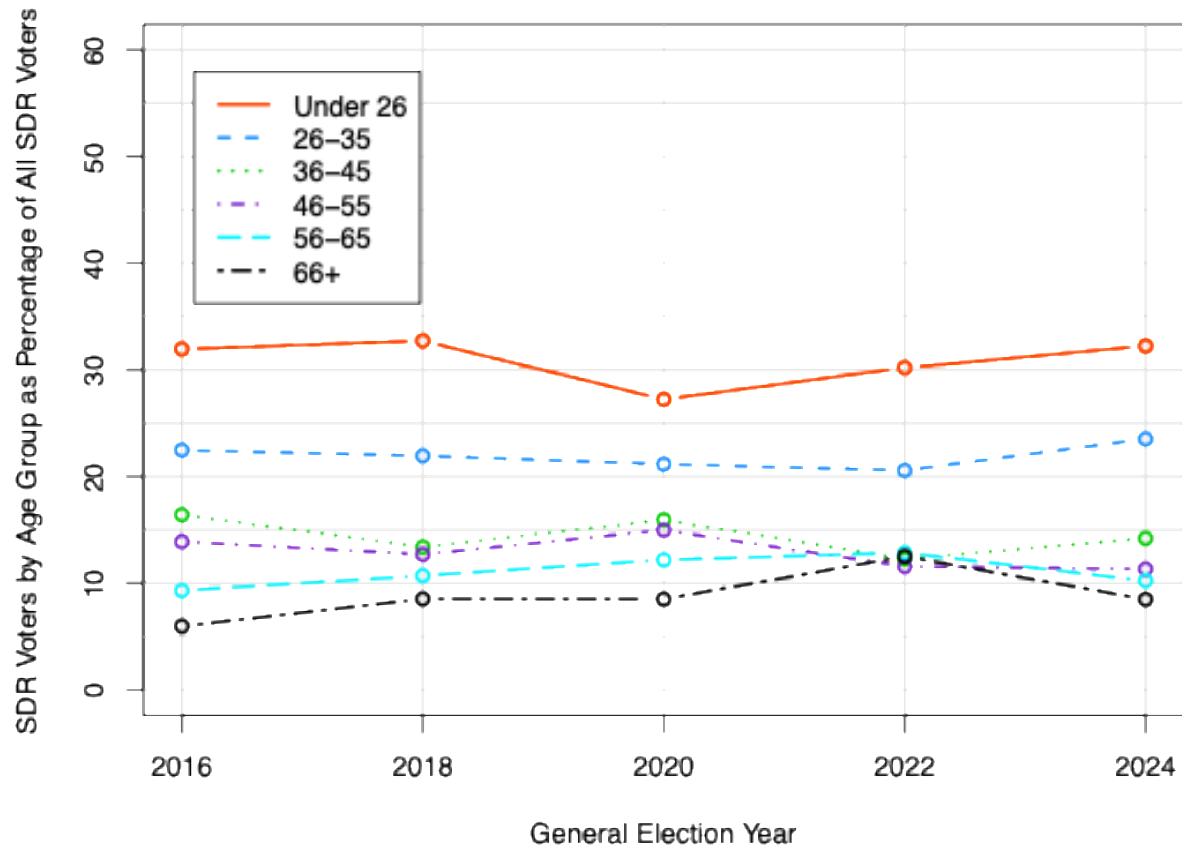


Figure 9. Voters in Each Age Group Who Registered and Voted in a Given General Election via Same-Day Registration as a Percentage of Same-Day-Registration Voters in that General Election. Tabulated from absentee files for each election and the SDR indicator variable.



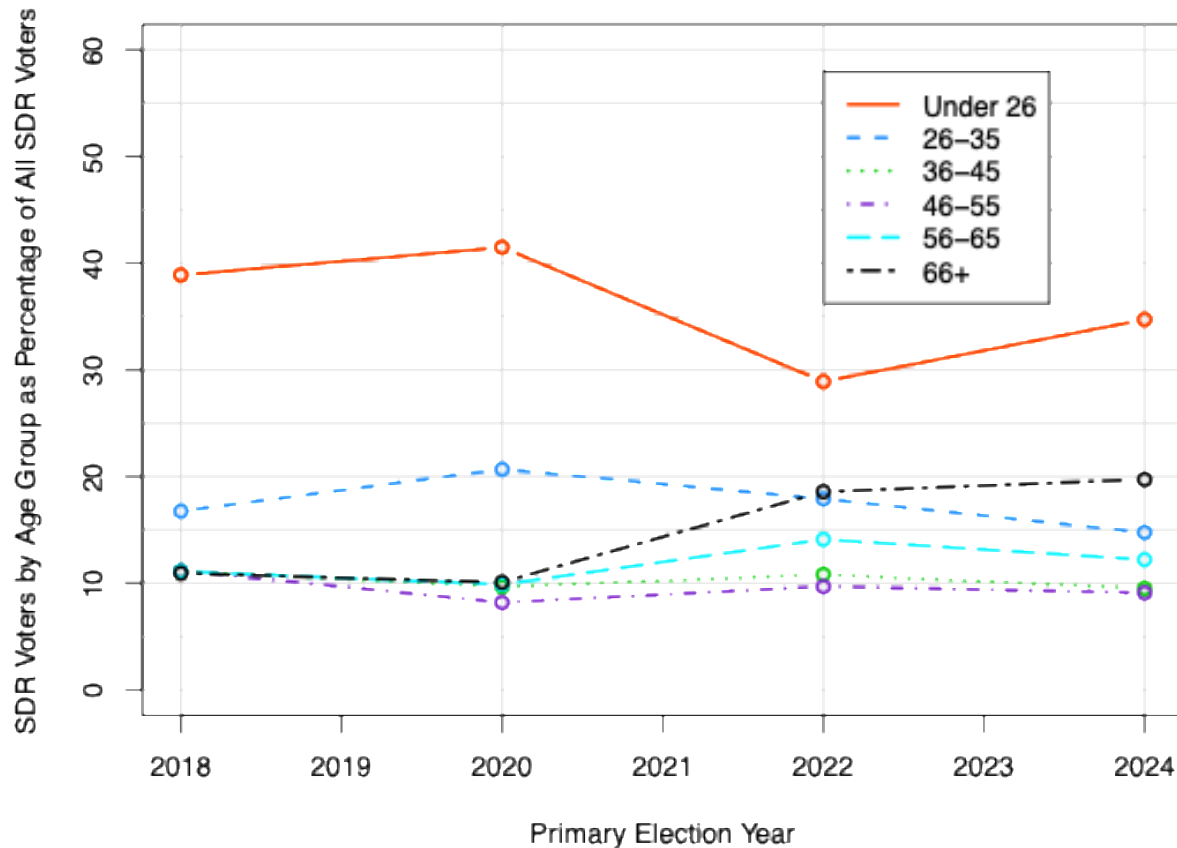


Figure 10. Voters in Each Age Group Who Registered and Voted in a Given Primary Election via Same-Day Registration as a Percentage of Same-Day-Registration Voters in that Primary Election. Tabulated from absentee files for each election and the SDR indicator variable.

91. To summarize, same-day registration is an important avenue for registering and then voting in a given election. For instance, over 42,000 youth voters registered and voted via same-day registration in the November 2024 general election. This was approximately 7% of the votes cast by youth voters.

92. Same-day registration also has a cumulative impact on voting from one election to the next. Once an individual successfully registers to vote via same-day registration, that individual will be registered to vote in future elections absent some intervening event impacting their voter eligibility

or voter registration status. As I already examined *supra* paras. 52 to 54 and Figure 4, from 2016 to 2024, same-day registrants have become an increasingly large fraction of those registrants who turn out to vote voters

93. Table 6 below further examines this trend by presenting information on turnout of individuals who registered via same-day registration at any point by age group. Each percentage in the table gives the number of same-day registrants within a given age group and election as a percentage of the total number of registrants in that age group and election. To be clear, for the purposes of this table, “same-day registrants” are those registrants who registered via same-day registration in the election in question or an earlier election.

94. Just as we saw higher rates of same-day registration among youth voters than among other age groups in particular elections, cumulative same-day registration is higher among youth voters than any other age group for every election. This is true even though voters who were under age 26 in the 2016 or 2018 elections were likely to have aged out of the youth voter category by the 2024 elections. In turn, this likely contributes to the significant rise in age 26-35 voters’ cumulative same-day registration in the 2024 general election.

	<b>Under 26</b>	<b>26-35</b>	<b>36-45</b>	<b>46-55</b>	<b>56-65</b>	<b>66+</b>	<b>Overall</b>
<b>2016 general</b>	7.02%	3.47%	2.18%	1.52%	1.02%	0.57%	<b>2.12%</b>
<b>2018 primary</b>	7.08%	2.47%	1.18%	0.71%	0.45%	0.25%	<b>0.88%</b>
<b>2018 general</b>	9.50%	4.83%	2.67%	1.86%	1.32%	0.79%	<b>2.41%</b>
<b>2020 primary</b>	10.26%	5.77%	2.74%	1.78%	1.33%	0.83%	<b>2.42%</b>
<b>2020 general</b>	10.14%	6.99%	4.75%	3.64%	2.82%	1.66%	<b>4.35%</b>
<b>2022 primary</b>	7.76%	6.46%	2.94%	1.89%	1.46%	0.91%	<b>2.02%</b>
<b>2022 general</b>	10.45%	7.87%	4.45%	3.14%	2.57%	1.64%	<b>3.66%</b>
<b>2024 primary</b>	8.62%	7.89%	3.96%	2.53%	2.06%	1.36%	<b>2.70%</b>
<b>2024 general</b>	10.95%	10.58%	6.69%	4.96%	4.17%	2.60%	<b>5.87%</b>

*Table 6. Turnout of North Carolina Same-Day Registrants, 2016-2024.* Each percentage is the number of registrants in an age group (at the time of that election) who both turned out to vote in that election and who registered via same-day registration at that election or an earlier election divided by the total number of registrants in that age group in that election multiplied by 100. Tabulated from voter snapshot files at each election date with the voter history “ncvhis\_Statewide.txt” file as well as the absentee files from each election indicating same-day-registration voting.

95. Figure 11 depicts the Under 26 column of Table 6 graphically. Within general elections, we see a rise in the percentage of youth registrants who are voting pursuant to a same-day registration at some point (possibly in an earlier election). The trend over time is less clear for primary elections due to a large increase in the percentage for the 2020 primary election (during the height of the COVID pandemic).

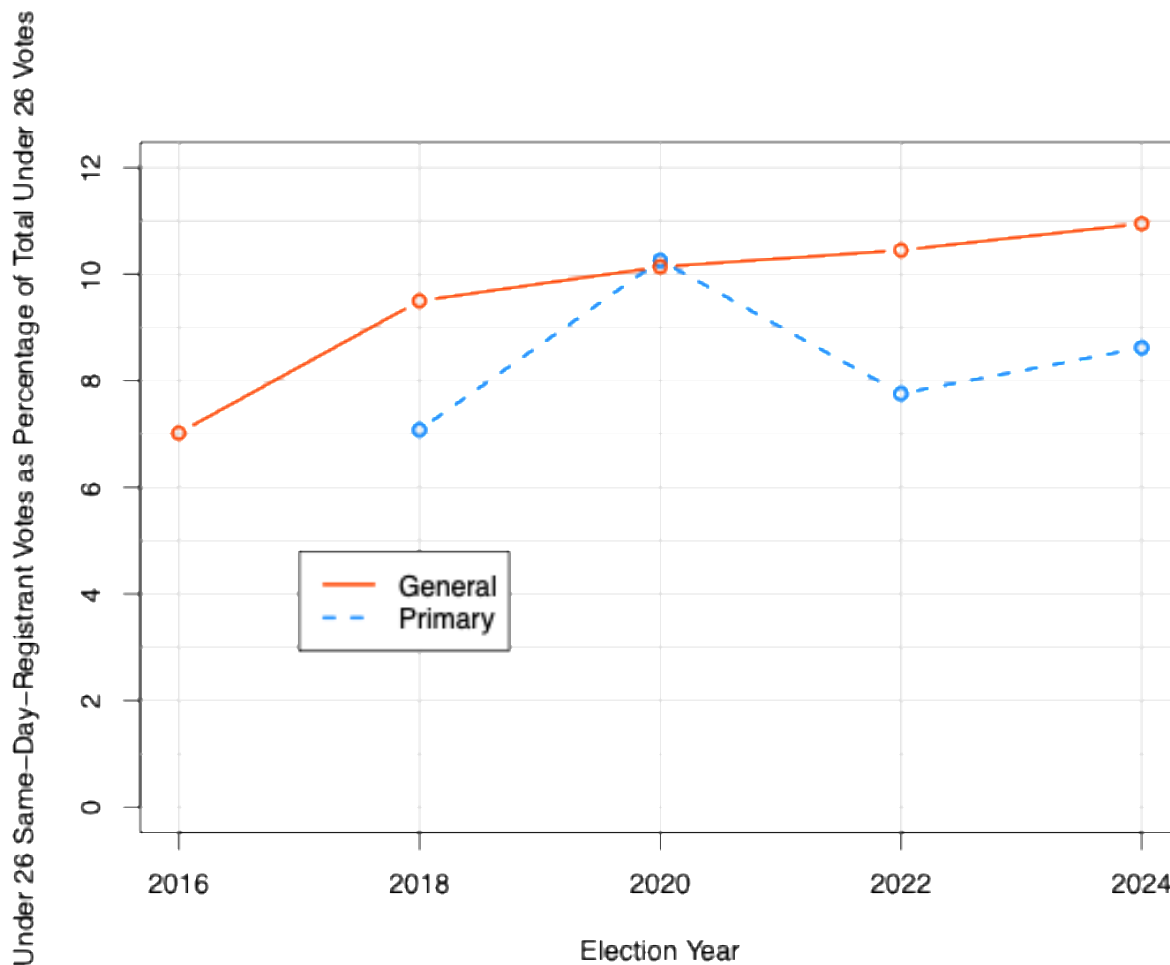


Figure 11. Turnout by Under-26-Year-Old Registrants, 2016-2024. Each dot corresponds to the number of under-26-year-old registrants (at the time of that election) who both turned out to vote in that election and who registered via same-day registration at that election or an earlier election divided by the total number of under-26-year-old registrants in that election multiplied by 100. Tabulated from voter snapshot files at each election date with the voter history “ncvhis\_Statewide.txt” file as well as the absentee files from each election indicating same-day-registration voting.

96. To summarize, youth voters are much more likely to take advantage of same-day registration than are voters in other age groups on a percentage basis and youth voters also have the highest number of same-day registrants in each election on an absolute basis. This is the case even though (a) youth voters use early voting—the period in which same-day registration is available—at lower rates than the voter population overall and (b) youth voters make up the smallest age group considered here.

97. In the elections analyzed here, youth voters are more than twice as likely to utilize same-day registration than voters overall and on occasion youth voters used same-day registration at rates more than 10 times higher than voters overall. Cumulative same-day registration is also higher among youth voters than any other age group.

## **VII. EMPIRICS OF MAIL VERIFICATION IN NORTH CAROLINA**

98. As noted above, mail verification plays an important role in the North Carolina voter registration process. Further, SB 747 changed how mail verification works for same-day registrants. Prior to SB 747, same-day registrants were verified using essentially the same two-mailer process used for non-same-day registrants. SB 747 changed the verification process so that same-day registrants are verified using only one mailer. Under this system, a same-day registrant does not have a second chance at mail verification if the first mailer to the voter's address is returned as undeliverable.

99. To gauge the effect that this change in the mail verification process may have, I look at data from the mail verification process going back to 2010. From highly confidential data provided to the plaintiffs, I can reconstruct the full voter verification history for all voters registered since January 1, 2010, who were not verified on the first mail verification step or who were denied registration due to address verification. In addition to the verification history, I have information

about these voters' ages and demographics from a combination of highly confidential and publicly-available State Board of Elections sources. Because I do not know exactly which voters used same-day registration prior to November 2016 (for the reason noted above *supra* n.11 & 12), the tables below are for all registrants since 2010. Note also that in response to a preliminary injunction, the State Board of Elections issued Numbered Memo 2023-05 which provides for a notice-and-cure process with a one-mailer verification system for same-day registrants. North Carolina elections began using this system beginning with the March 2024 primary election. I analyze the one-mailer system with the notice-and-cure process for same-day registrants separately in Section VIII.

#### **A. Two-Mailer Verifications from 2010 to 2025**

100. The changes made to the same-day registration system by SB 747 sharply narrow the possible pathways for a new registrant's address to be successfully verified. Because SB 747 eliminates the second mailer for same-day registrants, same-day registrants would not have the opportunity to be verified on a second verification mailer, unlike regular registrants (and pre-SB 747 same-day registrants). Under SB 747, same-day registrants are also not afforded the opportunity to receive an additional mailing (used in certain circumstances where the initial verification mailer is returned undeliverable but the Postal Service has a valid forwarding address for that registrant at that address). Both of these methods were historically used to verify registrants' addresses prior to the law change, but are now unavailable to same-day registrants.

101. Table 7 presents data<sup>17</sup> on voter registrations that were verified after either a second mailer or after a change-of-address-related forward from January 2010 to January 2025 as well as

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<sup>17</sup> Gaston County is not included in these data or in the other tabulations of data in this section. Data from Gaston County was not substantially present in the data I received electronically from the defendants in February 2025 ("2025-02-01 litigation\_ticket\_124972\_Parts1-2.zip"). Three voters from Gaston County from October/November 2024 were present in one of these files, but

the total number of second mailers and forwarding mailers sent. These two categories of verifications are defined by sequences of status codes in the voter status files provided by the State Board of Elections. The first category consists of individuals verified on the second mailer.<sup>18</sup> The second category contains those individuals who were verified after the mailer was returned due to an address change and a mailer was sent to a forwarding address provided by the postal service.<sup>19</sup>

<b>Calendar Year</b>	<b>Verified on Second Mailer</b>	<b>Verified after Forward</b>	<b>Total Second Mailers</b>	<b>Total Forwarding Mailers</b>
<b>2010</b>	1774	172	4994	1983
<b>2011</b>	2814	341	5180	2230
<b>2012</b>	7310	1451	15388	5953
<b>2013</b>	2469	497	4547	2748
<b>2014</b>	3530	396	6897	2564
<b>2015</b>	1721	243	2235	1381
<b>2016</b>	5801	788	11248	3889
<b>2017</b>	2771	326	4094	1847
<b>2018</b>	4007	457	7830	3098
<b>2019</b>	3441	501	6551	3886
<b>2020</b>	4339	1002	7604	4207
<b>2021</b>	2766	531	4632	3537
<b>2022</b>	3845	373	6580	2456
<b>2023</b>	3225	288	5512	2153
<b>2024</b>	8117	417	14971	2925
<b>2025</b>	812	15	1225	440
<b>Total</b>	58742	7798	109488	45297

*Table 7. Verifications on Second Mailer and After Forwarded Mailer by Year, 2010-2025.* Tabulated from “2025-02-01 litigation\_ticket\_124972\_1stVFY\_status\_list.txt” and “2025-02-01 litigation\_ticket\_124972\_1stVFY\_voter\_list.txt”.

no others were present. I reserve the right to supplement my analysis if data from Gaston County becomes available.

<sup>18</sup> Voters who are verified on second mailer are voters who had two sequential “verify steps” in the status file. These verify steps were “2ND VERIFICATION PENDING” AND “VERIFIED”. A second mailer would only go out if the first failed.

<sup>19</sup> Voters who are verified after forwarding have the verify step “FWD ADDRESS CHANGE (CONFIRMATION PENDING)” and then have a verify step of “VERIFIED” within 60 days. A time bound is used here because intervening mailers and steps may occur.

102. Looking at Table 7<sup>20</sup> we see that, overall, the largest category of verifications is the “Verified on Second Mailer” category, which has 58,742 voter records. This shows that over the past 15 plus years, county boards sent nearly 110,000 second mailers after an initial failed mail verification and nearly 60,000 North Carolina voters relied on that second mail verification step to successfully register to vote.

103. Table 8 below presents data on four categories relating to mail verification denials: individuals who were denied after two mailers were sent out;<sup>21</sup> individuals whose registration was denied after the mailer was forwarded due to an address change;<sup>22</sup> individuals whose registration was denied but later verified at the same address that they were denied at;<sup>23</sup> and individuals whose registration was denied but who later attempted to vote provisionally at the same address at which they were denied.<sup>24</sup> Individuals who were denied and later verified at the same address are individuals who seemingly had their same-day registration incorrectly rejected under the pre-SB-

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<sup>20</sup> This table is constructed from the files “2025-02-01 litigation\_ticket\_124972\_1stVFY\_status\_list.txt” and “2025-02-01 litigation\_ticket\_124972\_1stVFY\_voter\_list.txt”. Verified on second mailer voters were voters who had a “verify step” field of “ 2ND VERIFICATION PENDING” followed immediately by a field of “ VERIFIED”. Verified after forward voters were voters who had a “verify step” field of “ FWD ADDRESS CHANGE (CONFIRMATION PENDING)” and then a field of “ VERIFIED” fewer than 60 days afterwards. Total second mailers is the number of times a verify step of “ 2ND VERIFICATION PENDING” appeared in the status list, and the Total forwarding mailers is the number of times a verify step of “ FWD ADDRESS CHANGE (CONFIRMATION PENDING)” appeared in the status list. There were no records from Gaston County in either of these files.

<sup>21</sup> Voters who are denied after two mailers have a verify step of “ 2ND VERIFICATION PENDING” and then have a verify step of “ DENIED” immediately following.

<sup>22</sup> Voters who are denied after forwarding have a verify step of “ FWD ADDRESS CHANGE (CONFIRMATION PENDING)” and then have a verify step of “ DENIED” within 60 days. A time bound is used here because intervening mailers and steps may occur.

<sup>23</sup> Voters who are denied and then eventually get verified at that same address consist of anyone who has a verify step of “ DENIED” and then at any point in the future has a verify step of “ VERIFIED” with no intervening address change in registration or mailing address between the two based on date.

<sup>24</sup> These are individuals who were denied and have a record of attempting to vote provisionally in a subsequent election with the same address, regardless of whether their vote was counted.

747 two mailer verification process. Similarly, individuals who were denied and attempted to vote provisionally at the same address at which they were denied also appear to have been incorrectly rejected under the pre-SB-747 two mailer verification process.

<b>Calendar Year</b>	<b>Denied after Two Mailers</b>	<b>Denied after Forward</b>	<b>Denied &amp; Later Verified at Same Address</b>	<b>Denied &amp; Attempted to Vote Provisionally</b>
<b>2010</b>	2065	819	0	40
<b>2011</b>	2480	1836	4	57
<b>2012</b>	6880	3698	98	211
<b>2013</b>	2850	2764	14	67
<b>2014</b>	3795	2621	8	81
<b>2015</b>	1211	1727	12	63
<b>2016</b>	4681	2251	25	139
<b>2017</b>	2144	2431	13	42
<b>2018</b>	3724	3055	17	58
<b>2019</b>	3705	4111	13	53
<b>2020</b>	3165	4097	20	60
<b>2021</b>	2755	4251	21	36
<b>2022</b>	3119	2919	6	37
<b>2023</b>	2992	2827	6	29
<b>2024</b>	8002	2514	26	58
<b>2025</b>	583	264	0	0
<b>Total</b>	54151	42185	283	1031

Table 8. Denied Registrations After Two Mailers or Forwarded Mailer by Year, 2010-2025. Tabulated from “2025-02-01 litigation\_ticket\_124972\_Denied\_status\_list.txt” and “2025-02-01 litigation\_ticket\_124972\_Denied\_voter\_list.txt” as well as address history files and public provisional data.<sup>25</sup>

<sup>25</sup> This table is constructed from the files “2025-02-01 litigation\_ticket\_124972\_Denied\_status\_list.txt” and “2025-02-01 litigation\_ticket\_124972\_Denied\_voter\_list.txt”. Denied after two mailer voters have a verify step of “ 2ND VERIFICATION PENDING” followed immediately by a field of “ DENIED”. Denied after forward voters have a verify step of “ FWD ADDRESS CHANGE (CONFIRMATION PENDING)” and a field of “ DENIED” fewer than 60 days afterwards. Denied and later verified at same address voters are voters who have a verify step of “ DENIED” and then at any point in the future have a verify step of “ VERIFIED” with no intervening address change in registration or mailing address between the two statuses. Voters who are denied and attempted to vote provisionally are voters who have a verify step of “ DENIED” and then have a record of attempting



104. Here we see that the “Denied after Two Mailers” category has 54,151 voter records, which is slightly less than half of the total number of second mailers sent (see Table 7). And that the “Denied after Forward” category has 42,185 voter records, which shows a much higher rate of failure given that approximately 45,000 total forwarding mailers were sent (see Table 7). This high failure rate is present even though forwarding mailers are sent to addresses provided directly to the U.S. Postal Service by the voter.

105. As to the other two categories, there are 283 instances of individuals being denied after two mailers only to later have their registration verified at the address at which they were previously denied and 1,031 individuals who attempted to vote provisionally at the address at which their registration was denied. These categories both indicate that even the pre-SB-747 two-mailer verification process results in some voters having their registration denied (seemingly) incorrectly. As to the latter category, there is no record that any of these ballots were counted. Accordingly, the opportunity to vote a provisional ballot has not functioned as a safeguard for anyone whose registration was erroneously denied.

106. Table 9 below breaks the data in Table 7 down by age group.

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to vote provisionally in an election after the denial date. Three voters from Gaston County in October/November 2024 were present in these files.

<b>Age</b>	<b>Verified on Second Mailer</b>	<b>Verified after Forward</b>	<b>Total Second Mailers</b>	<b>Total Forwarding Mailers</b>
<b>Under 26</b>	26755	3207	51371	22559
<b>26-35</b>	12374	1327	21976	8344
<b>36-45</b>	6991	944	12868	5344
<b>46-55</b>	5651	904	10544	4268
<b>56-65</b>	4212	773	7710	2861
<b>66 or older</b>	2759	643	5019	1931
<b>TOTAL</b>	58742	7798	109488	45297

*Table 9. Verifications on Second Mailer and After Forwarded Mailer by Age, 2010-2025.* This table was constructed from the same data as Table 7. Age is constructed from the year of the occurrence of the column event (verified status change or when the second or forwarding mailer was sent) minus the year of birth. As a result, this is an approximate age.

107. Individuals under the age of 26 are the largest group of voters who have a second mailer sent or who rely on post-change-of-address forwarding. Nearly half of the individuals in the “Verified on Second Mailer” category are youth voters. Again, these are individuals who relied on the second mailer to verify their registration. If the second mailer were not available, it is almost certain that these individuals would have failed verification and thus had their registration denied.

108. Similarly, the largest age group in the “Verified after Forward” category are individuals under the age of 26. These youth voters make up over 40% of this category.

109. Table 10 below breaks the data in Table 8 down by age group.

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<b>Age</b>	<b>Denied after Two Mailers</b>	<b>Denied after Forward</b>	<b>Denied &amp; Later Verified at Same Address</b>	<b>Denied &amp; Attempted to Vote Provisionally</b>
<b>Under 26</b>	27227	22964	104	452
<b>26-35</b>	10716	7823	63	171
<b>36-45</b>	6200	4744	45	135
<b>46-55</b>	4936	3423	35	127
<b>56-65</b>	3184	2070	30	92
<b>66 or older</b>	1888	1161	6	54
<b>TOTAL</b>	54151	42185	283	1031

*Table 10. Denied Registrations After Two Mailers or Forwarded Mailer by Age, 2010-2025.* This Table was constructed from the same data as Table 8. Age is constructed from the year of the occurrence of the column event (denied status change for the first three columns or, for the last column, when the provisional vote was attempted) minus the year of birth. As a result, this is an approximate age.

110. Over half of the individuals whose registration was denied, either after two mailers or after a change-of-address-related forward, are youth voters. Youth voters are also approximately 37% of those who were initially denied but later verified at the same address.

111. Taken together, these facts indicate that the mail verification process is a relatively difficult process for youth voters to successfully navigate, and that SB 747 is likely to exacerbate those difficulties. Those under 26 years of age are disproportionately more likely to fail the mail verification process than those in older age groups. The number of individuals under 26 with failed mail verifications would be even larger without the use of a second mailer given the rates at which individuals under 26 use that second mailer to verify. Historically, individuals under the age of 26 are the largest group of individuals receiving a second mailer. Since 2010, this second mailer was responsible for over 26,000 verifications of youth voter registrations.

## **B. Presence of Secondary Mailing Address and Verification Status**

112. Related to the question of whether status as a youth voter is associated with being verified on the second mailer or after a forwarded mailer is whether other voter characteristics are

associated with these modes of verification. Given the importance of being able to reliably receive mail for the mail verification process, I investigate information on the addresses provided by potential registrants.

113. The North Carolina voter registration form requires registrants who “do not receive mail at [their] residential address” to provide a separate mailing address on their registration form.<sup>26</sup> To investigate the possibility that the presence of a mailing address distinct from a residential address is somehow related to the verification status after a second mailer is sent out, I reconstruct tables analogous to Tables 9 and 10 but composed of only those records that include a separate mailing address. This results in Tables 11 and 12.

<b>Age</b>	<b>Verified on Second Mailer</b>	<b>Verified after Forward</b>	<b>Total Second Mailers</b>	<b>Total Forwarding Mailers</b>
<b>Under 26</b>	3310	401	5988	1672
<b>26-35</b>	917	182	1733	1161
<b>36-45</b>	540	137	1123	817
<b>46-55</b>	482	158	1007	690
<b>56-65</b>	485	163	996	553
<b>66 or older</b>	382	121	801	405
<b>TOTAL</b>	6116	1162	11648	5298

*Table 11. Verifications on Second Mailer and After Forwarded Mailer by Age Among Individuals with a Non-Blank Mailing Address Field, 2010-2025.* This table was constructed from the same data as Table 7 and restricting attention to those records with a non-blank mailing address field.

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<sup>26</sup> North Carolina Voter Registration Application, *supra* n.**Error! Bookmark not defined..**

<b>Age</b>	<b>Denied after Two Mailers</b>	<b>Denied after Forward</b>	<b>Denied &amp; Later Verified at Same Address</b>	<b>Denied &amp; Attempted to Vote Provisionally</b>
<b>Under 26</b>	2882	1474	8	61
<b>26-35</b>	764	1313	1	22
<b>36-45</b>	470	819	2	19
<b>46-55</b>	391	594	1	20
<b>56-65</b>	316	420	3	17
<b>66 or older</b>	228	271	0	10
<b>TOTAL</b>	5051	4891	15	149

*Table 12. Denied Registrations After Two Mailers or Forwarded Mailer by Age Among Individuals with a Non-Blank Mailing Address Field, 2010-2025.* This table was constructed from the same data as Table 8 and restricting attention to those records with a non-blank mailing address.

114. The first fact that is immediately apparent from an inspection of Tables 11 and 12 is that most of the registration records in Tables 9 and 10 that involve either a second mailer or a change-of-address-related forward do not have a mailing address in addition to a residential address. This can be seen in the fact that the column totals in Tables 11 and 12 are between 5% and 15% of the corresponding column totals in Tables 9 and 10. In other words, the vast majority of denials—whether by two mailers or a forwarding mailer—involved registrants who only listed a single address: their residential address.

115. Second, if we look back to Table 9, we see that 29,962 youth voters were verified after either a second mailer or a forwarded mailer—this is out of the 73,930 second mailers and forwarded mailers sent. This corresponds to an overall youth verification rate from second mailers and forwarded mailers of 40.5% (29,962 / 73,930). The equivalent numbers for those youth voters who included a mailing address on their registration are 3,711 youth voters verified after either a second mailer or a forwarded mailer out of 7,660 total second mailers and forwarded mailers, which is a verification rate of 48.4%, which is only a modest increase in the verification rate.

116. Computing these numbers for all voters, we see that 66,540 voters were verified after either a second mailer or a forwarded mailer out of the 154,785 second mailers and forwarded mailers sent (43.0%). The equivalent numbers for all voters who included a mailing address on their registration are 7,278 voters verified after either a second mailer or a forwarded mailer out of 16,946 total second mailers and forwarded mailers, which is a verification rate of 42.9%. Similar to youth voters, the presence or absence of a mailing address in addition to a residential address does not result in a substantively meaningful difference in the two-mailer or forwarded-mail verification rate for voters overall.

117. To summarize, among those same-day registrants (across all age groups including among youth registrants) who receive a second mailer or a change-of-address-related forward, most of the verification denials are of voters who listed a single address (their residential address) without providing an additional mailing address. For those same-day registrants who have put both a mailing address and a residential address on their registration form and receive a second mailer or a change-of-address-related forward, there is no substantively meaningful difference in verification rates.

### **C. High-Density Addresses and Verification Status**

118. I next investigate whether registrants who (a) are sent a second mailer (and thus have failed the first mailer verification step) and (b) live at a location where many other individuals have attempted to register during the 2010-2025 time period are more likely to be youth registrants. I undertake this analysis to determine whether certain types of living situations are positively associated with youth registrants and with receiving a second mailer (and thus a failure of the first mail verification step). Such an association would highlight how individuals in some types of

living situations are particularly likely to rely on the presence of a second mailer to verify their registration.

119. I begin by looking at all new registration records that are linked to a “general address.”<sup>27</sup> I restrict attention to just those registration records that are linked to general addresses that have more than 25 registration records over the 16 years covered in the 2010-2025 data. I call these addresses “high-density addresses.” Within these records I then tabulate the number of registrants that were either verified on the second mailer or denied on the second mailer. This information is presented in Table 13.

Age	Verified on Second	Denied on Second	Total New Registrants (2010-2025) at an Address with More than 25 Registrants
<b>Under 26</b>	1752	2276	511461
<b>26-35</b>	159	246	283927
<b>36-45</b>	109	177	105717
<b>46-55</b>	87	153	83446
<b>56-65</b>	51	100	66097
<b>66+</b>	10	19	82576
<b>Total</b>	2168	2971	1050648

*Table 13. Second Mailer Verification Status Among Individuals Attempting to Register at Addresses with More than 25 Registrants.* Table constructed from the same data as Table 7 and Table 8 as well as public voter snapshot files from 2010 through 2025. The total new registrants comes from all registrants from January 1, 2010 to January 1, 2025.

120. Looking at Table 13 we see that youth registrants make up a larger fraction of the records from these addresses than any other age group. 511,461 records come from those under 26 years of age. The next largest age group is the 26-35 group and that group contributes only 283,927

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<sup>27</sup> By “general address” I mean an address composed of a city, zip code, street name, and street number but that does not include apartment or unit identifiers. Thus, all apartments in an apartment building would have the same general address. Similarly, all rooms in a college dormitory or residence hall would have the same general address.

records. In other words, youth registrants are nearly twice as numerous as the next largest age group.

121. With the help of a research assistant, I investigated the type of residences that correspond to the high-density addresses in Table 13. There are 31 unique high-density addresses among the 2,168 individuals in the “Verified on Second” column. 16 of these 31 correspond to a college address (51.61%).<sup>28</sup> There are 48 unique high-density addresses among the 2,971 individuals in the “Denied on Second” column. 23 of these 48 correspond to a college address (47.92%). There are 15,099 unique high-density addresses among the 1,050,648 individuals in the “Total New Registrants” column. I asked my research assistant to sample 50 of these addresses using simple random sampling. In other words, 50 addresses were randomly selected (with equal probability) from the 15,099 unique addresses in the “Total New Registrants” column. 3 of these 50 randomly sampled addresses are college addresses. 3 out of 50 is 6%. We thus estimate that 6% of the 15,099 unique addresses in the “Total New Registrants” column correspond to college addresses. This percentage of college addresses in the sample is statistically significantly different from the smallest percentage in the other two columns (47.92%) at the 0.001 level.<sup>29</sup>

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<sup>28</sup> To determine whether or not the address corresponded to a college address, the address was searched in Google Maps. If it returned a building or address on the physical campus of a public or private college or university, it was counted as a college address. While there were no ambiguous addresses in the list, addresses were not counted as a college address unless there was affirmative evidence it was a campus-owned property. Off-campus commercial residences, even if they were physically extremely close to a college or university were not included as a college address, so these estimates are conservative.

<sup>29</sup> Using the `binom.test()` function in the R language for statistical computing to conduct an exact binomial test, the *p*-value for the test of the null hypothesis that this sample was drawn from a population in which 47.92% of addresses are college addresses is 0.0000000001484. The alternative hypothesis was that this sample was not drawn from a population in which 47.92% of addresses are college addresses. The test was conducted as `binom.test(x=3, n=50, p=0.4792)`.



122. In other words, the vast majority of individuals who are attempting to register at a high-density address do not reside at a college address. These individuals are also not failing the first mailer (i.e., they are not being sent a second mailer). However, those high-density residents who did fail the first mailer (and thus were sent a second mailer) are approximately 8 times more likely to reside at a college address (47.92% of those failing the first mailer) than new high-density registrants generally (6.00%). Indeed, 51.61% and 47.92% of the addresses in the two second mailer columns (Verified and Denied, respectively) correspond to college addresses. Within this group of high-density registrants, those who fail the first mail verification step (and who would thus need the availability of the second mailer to verify their registration) are disproportionately individuals who reside at college addresses.

#### **VIII. 2024 Election SB 747 Notice-and-Cure Analysis**

123. In response to a preliminary injunction, the State Board of Elections modified the SB 747 one-mailer verification system for same-day registrants to include a notice-and-cure process.<sup>30</sup> This notice-and-cure process applies to same-day registrants in 2024 whose first mail verification is returned as undeliverable before the close of two business days before the county canvass.<sup>31</sup>

124. If the county board determines that the address on the mailer was incorrectly entered by county board staff (as compared to the address in the voter registration form), the county board shall send a new mail verification to the correct address, effectively restarting the mail verification process.<sup>32</sup>

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<sup>30</sup> See Numbered Memo 2023-05, *supra* n.15.

<sup>31</sup> *Id.* at 6.

<sup>32</sup> *Id.* at 7.

125. If the address on the first mailer was deemed to be correct, then the county board shall attempt to provide notice to the affected individual by mail (and email and phone if such contact information is available in the voter registration form).<sup>33</sup> Once contacted, “[t]he registrant may verify their address (i.e., ‘cure’ the failed mail verification) by submitting a copy of a same-day registration ‘HAVA document’ to the county board no later than 5 p.m. on the day before county canvass.”<sup>34</sup>

126. If the registrant verifies their address either by providing a “HAVA document” before 5 p.m. on the day before the canvass or provides such verification to the county board at the canvass, the cure is successful. Otherwise, the cure fails.

127. In this section, I investigate how often SB 747, as applied with this notice-and-cure process, results in successful verifications (cures) after a failure of the first mailer verification.

128. To do this, I merge and tabulate data from three different types of files either produced or made publicly available by the State Board of Elections. These types of files are:

a. Public absentee files that contain information about all early voters, including those specifically voting by same-day registration. These files are “absentee\_20240305.csv” and “absentee\_20241105.csv”—while there was a second primary on May 5 and a corresponding “absentee\_20240514.csv”, no one voted via same-day registration in these contests.

b. The second file type highlights the end-state for everyone attempting to vote via same-day registration in March or November of 2024. “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” contains information about all voters for whom the first mailer was undeliverable and their resulting outcome of the

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<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

cure process. While not used in these tabulations in this section, “NCSBE\_003098 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Verification\_History\_2024.CSV” pairs with this file and shows the full status history for these same-day-registration voters that failed mail verification in the 2024 elections.

c. Finally, the third file type that is used in this section is the standard public voter history file (“ncvhis\_Statewide.txt”) and public voter file (“ncvoter\_Statewide.txt”) that are publicly available on the North Carolina State Board of Elections website. The voter history file was generated on February 23, 2025, and retrieved on February 26, 2025, and the voter file was generated on March 3, 2025, and retrieved on March 3, 2025. These files were subset to all votes cast and counted in March and November 2024 and then merged to the data above on the ncid field. This allows me to determine whether the individuals attempting to register and vote via same-day registration but who failed the first mailer and thus had to make use of the notice-and-cure process eventually had their vote counted or not and whether they remain as a registered voter in March 2025.

129. Table 14 below presents data on same-day-registration voters in the March 2024 primary election broken down by age category. The DENIED – DEFAULT TIME LIMIT column corresponds to the individuals who failed the first mailer and did not verify their address prior to the time-limit specified in Numbered Memo 2023-05. The DENIED – FAILED CURE column corresponds to the individuals whose response to address verification notice was deemed to be insufficient by the county board. The STARTED CURE PROCESS column is a processing step that indicates that the county board has received a first mailer back as undeliverable and has begun the process of sending out the cure notice. The STARTED NEW MAILING column corresponds to those individuals who were affected by an erroneously entered address on the first mailer and who were sent a new verification mailer with a corrected address. The VERIFIED – SDR CURE

column corresponds to the individuals whose same-day registration was cured by the notice and cure process. The ACCEPTED WITHOUT CURE column corresponds to same-day registrants whose ncid is located on the public list of same-day-registration voters in the absentee files but who are not in the NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV file, thus indicating they were a successful same-day-registration vote with no need for cure.

	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED CURE PROCESS</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>Under 26</b>	11	5	1	3	0	1961
<b>26-35</b>	5	0	0	1	1	835
<b>36-45</b>	2	1	1	0	1	537
<b>46-55</b>	6	1	0	0	5	511
<b>56-65</b>	1	0	0	0	3	693
<b>66+</b>	9	1	1	0	1	1116
<b>Total</b>	34	8	3	4	11	5653

*Table 14. March Primary 2024 Same-Day-Registration Voting.* Tabulated from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20240305.csv”.

130. Table 14 (along with Tables 15, 16, 17, 18, and 19) include a small number of records with duplicate ncid values.<sup>35</sup> I understand from testimony given by representatives from the State Board of Elections that duplicate entries of this sort are not uncommon and often the result of administrative errors by election workers processing same day registrations. Rather than

<sup>35</sup> In the combined March 2024 primary and the November 2024 general election data, there were 8 duplicate records in the DENIED – DEFAULT TIME LIMIT category, 4 in the DENIED – FAILED CURE category, 4 in the STARTED NEW MAILING category, 8 in the VERIFIED – SDR CURE category, and 417 in the ACCEPTED WITHOUT CURE category.

attempt to adjudicate which of the duplicate records is “correct”, I include the duplicate records in the tabulations. Given the small numbers of duplicates, this does not affect my conclusions.

131. What we see from Table 14 concerning the 2024 Primary is that the notice-and-cure process was not effective for youth voters. Of the 17 individuals under 26 years of age who attempted to vote via same-day registration and failed the first mailer verification<sup>36</sup>—but were not judged to have had an erroneous address on the first mailer—none were successfully cured. Three youth voters did have a new mailing initiated, however, because address errors were identified by county board staff.

	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>Under 26</b>	418	47	86	76	41497
<b>26-35</b>	213	40	29	47	30415
<b>36-45</b>	87	23	9	33	18411
<b>46-55</b>	77	22	13	30	14664
<b>56-65</b>	80	22	16	33	13214
<b>66+</b>	70	22	19	39	10961
<b>Total</b>	945	176	172	258	129162

*Table 15. November General 2024 Same-Day-Registration Voting.* Tabulated from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20241105.csv”.

132. Table 15 presents similar data from the November 2024 general election. We again see that the notice-and-cure process was not effective for youth voters. Of the 541 youth voters who failed the first mailer verification and were not judged to have had an erroneous address on

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<sup>36</sup> 11 youth voters were DENIED – DEFAULT TIME LIMIT, 5 youth voters were DENIED – FAILED CURE, 1 youth voter was STARTED CURE PROCESS, and 0 youth voters were VERIFIED – SDR CURE. Adding these three numbers together yields 17 youth voters.

the first mailer<sup>37</sup> (and thus who had to make use of the notice-and-cure process), only 76 had their ballots cured (14%). This is a much lower fraction of cures than for any other age group other than 26- to 35-year-olds, who were at 16%. For instance, 30% of the attempted cures for those 66 and older were successful. It is also lower than the overall fraction of cures for all voters who failed the first mailer verification and were not judged to have had an erroneous address on the first mailer, which is 18.7% (258 of 1379).

133. From Table 15 we also see that 86 of the 172 registrants who made use of the new mailing after an address error were youth voters (50%). These individuals would not have successfully registered under SB 747 without the New Mailing provision of the notice-and-cure process.

134. Similar to the analysis of high-density addresses in Section VII.C, I found all general addresses that have more than 25 same-day registrations in 2024 (across both the primary and general elections). There are 84 such high-density addresses.<sup>38</sup> Examining these addresses, I find that 62 of the 84 addresses (73.81%) are college addresses. These 84 addresses house 5,807 same-day-registration voters in 2024, or 4.26% of the total.

135. The verification status values tabulated in Tables 14 and 15 are from the county boards' processing of undeliverable first mailers recorded in the file "NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV". As such, these values represent intermediate processing decisions by county boards and not the final status of a

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<sup>37</sup> 418 youth voters were DENIED – DEFAULT TIME LIMIT, 47 youth voters were DENIED – FAILED CURE, and 76 youth voters were VERIFIED – SDR CURE. Adding these three numbers together yields 541 youth voters.

<sup>38</sup> One would expect to see comparatively fewer addresses in this category when limited to the post-SB 747 same-day-registrants-only environment, which captures only one year of election data for only one type of registration, compared to the full study environment, which captures 16 years of election data.

same-day-registration ballot. This latter piece of information comes from the ballot-return-status field in the public absentee file.

136. To examine the relationship between verification status codes and ballot-return status for individuals who attempted to register and vote via same-day registration in the March 2024 primary or the November 2024 general election, I cross-tabulate their verification status codes and their ballot return status codes. This tabulation appears in Table 16.

	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED CURE PROCESS</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>(Blank)</b>	0	0	0	0	0	34
<b>ACCEPTED</b>	27	6	1	171	264	134343
<b>CANCELLED</b>	36	8	0	2	2	374
<b>CONFLICT</b>	0	0	0	0	0	2
<b>DUPLICATE</b>	0	0	0	0	0	4
<b>NOT VOTED</b>	0	2	0	0	2	50
<b>SDR-FAILED VERIFICATION</b>	916	168	2	3	1	6
<b>WRONG VOTER</b>	0	0	0	0	0	2
<b>Total</b>	979	184	3	176	269	134815

*Table 16. March & November 2024 Same-Day-Registration Ballot-Return Statuses in Public Absentee File (rows) by Verification Status (columns). Tabulated from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20240305.csv” and “absentee\_20241105.csv”.*

137. Looking at Table 16, we see that there is generally good agreement between verification status and ballot-return status. Of the 979 records with verification status equal to DENIED – DEFAULT TIME LIMIT, 916 had ballot-return status SDR-FAILED VERIFICATION (93.6%). Similarly, of the 184 records with verification status equal to DENIED – FAILED CURE, 168 had ballot-return status SDR-FAILED VERIFICATION (91.3%). Of the 176 records with verification status STARTED NEW MAILING, 171 had a ballot-return status of ACCEPTED

(97.2%). Of the 269 records with verification status VERIFIED – SDR CURE, 264 had a ballot-return status of ACCEPTED (98.1%). Finally, of the 134,815 records with verification status ACCEPTED WITHOUT CURE, 134,343 had a ballot-return status of ACCEPTED (99.6%).

138. An analysis of the 176 registrants who appear in the STARTED NEW MAILING category and therefore received a corrected verification mailer after the discovery of data entry error by the county board of elections shows that a substantial majority of these registrants ultimately verified at their listed registration address. Table 17 below shows the above categories tabulated with the voter registration status as of March 2<sup>nd</sup>, 2025 in rows by matching voter ncids to the public voter file. 87.50% (154 of 176) voters with the status of “STARTED NEW MAILING” are active and 97.72% (172 of 176) voters with this status are either active or inactive.

	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED CURE PROCESS</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>ACTIVE</b>	55	11	2	154	225	131698
<b>DENIED</b>	423	81	0	2	0	51
<b>INACTIVE</b>	3	3	1	18	42	2338
<b>REMOVED</b>	217	40	0	1	0	485
<b>TEMPORAR Y</b>	0	0	0	0	0	1
<b>(Not in File)</b>	281	49	0	1	2	242
<b>Total</b>	979	184	3	176	269	134815

*Table 17. Verification status of 2024 same-day registrants.* Tabulating ncid appearing in “ncvoter\_Statewide” public file on March 2, 2025 against same-day-registration cure status from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20240305.csv” and “absentee\_20241105.csv”

139. Similarly, in Table 18, I cross-tabulate verification status codes from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” with the record of whether an individual voted in either the March 2024 primary or November 2024 general election from the public voter history file (“ncvhis\_Statewide.txt”).



	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED CURE PROCESS</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>Not Voted</b>	950	173	2	3	5	337
<b>Voted</b>	29	11	1	173	264	134478
<b>Total</b>	979	184	3	176	269	134815

*Table 18. 2024 Vote status of 2024 same-day registrants.* Tabulating against ncid appearing in “ncvhis\_Statewide” public file as having voted in either the March or November 2024 election. Tabulated from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20240305.csv”, “absentee\_20241105.csv”, and “ncvhis\_Statewide.txt” voter history file.

140. Looking at Table 18, we again see a strong association between voting and verification status with those who were denied verification for any reason being very unlikely to have voted and those who were verified for any reason being very likely to have voted.

141. The takeaway from Tables 16, 17, and 18 is that same-day-registration verification is consequential. Individuals who attempt to vote via same-day registration but who are not verified generally do not end up having their ballot accepted or their vote counted. Combined with the information in Tables 14 and 15, which show that the notice-and-cure process is not effective for youth voters (overall or compared to other age groups), it follows that SB 747 as applied with the notice-and-cure process results in youth voters not having their ballots accepted and counted.

142. Next, in Table 19, I tabulate the verification status of same-day registrants by county using the data from the March 2024 primary and November 2024 general election combined. Inspection of this table reveals that the distribution of verification codes differs considerably across counties. There is also a substantial amount of variability in the number of records with the STARTED NEW MAILING verification status across counties. In other words, address errors on the first mailer seem to be made and/or caught by county boards at different rates across counties.

	<b>DENIED - DEFAULT TIME LIMIT</b>	<b>DENIED - FAILED CURE</b>	<b>STARTED CURE PROCESS</b>	<b>STARTED NEW MAILING</b>	<b>VERIFIED - SDR CURE</b>	<b>ACCEPTED WITHOUT CURE</b>
<b>ALAMANCE</b>	23	6	0	0	3	2247
<b>ALEXANDER</b>	10	0	0	1	2	471
<b>ALLEGHANY</b>	0	0	0	0	0	137
<b>ANSON</b>	0	0	0	0	0	269
<b>ASHE</b>	2	0	0	0	0	277
<b>AVERY</b>	0	3	0	0	0	148
<b>BEAUFORT</b>	0	0	0	0	0	491
<b>BERTIE</b>	0	0	0	0	0	198
<b>BLADEN</b>	0	0	0	0	0	448
<b>BRUNSWICK</b>	22	0	0	5	6	1874
<b>BUNCOMBE</b>	94	0	0	0	15	2607
<b>BURKE</b>	0	1	0	0	0	1123
<b>CABARRUS</b>	9	0	0	0	1	2385
<b>CALDWELL</b>	0	0	0	0	7	1232
<b>CAMDEN</b>	0	0	0	0	2	93
<b>CARTERET</b>	1	7	0	0	0	876
<b>CASWELL</b>	0	0	0	0	9	263
<b>CATAWBA</b>	0	27	0	0	23	2041
<b>CHATHAM</b>	0	0	0	0	32	948
<b>CHEROKEE</b>	0	6	0	0	0	262
<b>CHOWAN</b>	0	0	0	0	0	138
<b>CLAY</b>	0	2	0	0	0	127
<b>CLEVELAND</b>	1	0	0	2	0	1314
<b>COLUMBUS</b>	0	0	0	0	0	516
<b>CRAVEN</b>	1	0	0	0	0	1381
<b>CUMBERLAND</b>	67	0	0	1	4	3764
<b>CURRITUCK</b>	0	0	0	0	2	209
<b>DARE</b>	0	0	0	0	0	307
<b>DAVIDSON</b>	1	0	0	1	0	2138
<b>DAVIE</b>	0	0	0	0	21	537
<b>DUPLIN</b>	2	0	0	0	1	488
<b>DURHAM</b>	47	0	0	43	2	5522
<b>EDGECOMBE</b>	3	0	0	5	0	694
<b>FORSYTH</b>	85	3	1	0	4	5597
<b>FRANKLIN</b>	16	1	0	1	3	1100
<b>GASTON</b>	3	0	1	1	0	2765

<b>GATES</b>	0	0	0	0	0	105
<b>GRAHAM</b>	0	0	0	0	0	81
<b>GRANVILLE</b>	3	0	0	0	0	696
<b>GREENE</b>	0	0	0	0	0	197
<b>GUILFORD</b>	3	1	0	0	0	8757
<b>HALIFAX</b>	2	0	0	0	0	469
<b>HARNETT</b>	7	0	0	17	0	2125
<b>HAYWOOD</b>	0	0	0	1	0	690
<b>HENDERSON</b>	0	0	0	4	1	1090
<b>HERTFORD</b>	0	0	0	0	0	303
<b>HOKE</b>	0	0	0	0	0	981
<b>HYDE</b>	0	0	0	0	0	20
<b>IREDELL</b>	0	0	0	0	0	2262
<b>JACKSON</b>	4	25	0	1	40	1369
<b>JOHNSTON</b>	0	2	0	0	0	3147
<b>JONES</b>	0	0	0	0	0	99
<b>LEE</b>	0	9	0	0	2	717
<b>LENOIR</b>	16	0	0	0	0	558
<b>LINCOLN</b>	10	0	0	0	1	1348
<b>MACON</b>	0	4	0	0	1	355
<b>MADISON</b>	11	1	0	1	0	347
<b>MARTIN</b>	3	0	0	0	0	170
<b>MCDOWELL</b>	0	22	0	0	15	640
<b>MECKLENBURG</b>	25	2	0	26	1	14442
<b>MITCHELL</b>	4	0	0	0	0	150
<b>MONTGOMERY</b>	0	0	0	0	0	317
<b>MOORE</b>	30	5	0	0	6	1133
<b>NASH</b>	0	16	0	0	1	1199
<b>NEW HANOVER</b>	231	0	0	5	0	2665
<b>NORTHAMPTON</b>	1	1	1	3	0	149
<b>ONSLOW</b>	1	9	0	27	3	2667
<b>ORANGE</b>	57	4	0	0	1	2779
<b>PAMLICO</b>	0	0	0	0	0	156
<b>PASQUOTANK</b>	0	0	0	0	0	512
<b>PENDER</b>	0	0	0	0	0	1163
<b>PERQUIMANS</b>	0	0	0	0	0	135
<b>PERSON</b>	4	0	0	0	6	430
<b>PITT</b>	30	0	0	4	1	2744
<b>POLK</b>	0	0	0	0	0	278

<b>RANDOLPH</b>	19	0	0	7	2	1684
<b>RICHMOND</b>	0	0	0	0	2	334
<b>ROBESON</b>	7	1	0	1	6	1429
<b>ROCKINGHAM</b>	5	0	0	0	0	1236
<b>ROWAN</b>	0	0	0	0	0	1723
<b>RUTHERFORD</b>	2	0	0	0	0	631
<b>SAMPSON</b>	0	2	0	0	0	572
<b>SCOTLAND</b>	0	2	0	0	12	325
<b>STANLY</b>	0	5	0	7	0	817
<b>STOKES</b>	6	1	0	0	3	653
<b>SURRY</b>	15	0	0	0	4	816
<b>SWAIN</b>	2	0	0	0	0	228
<b>TRANSYLVANIA</b>	0	0	0	1	0	395
<b>TYRRELL</b>	0	0	0	0	0	62
<b>UNION</b>	35	1	0	3	2	2870
<b>VANCE</b>	6	0	0	0	0	484
<b>WAKE</b>	34	0	0	4	12	12249
<b>WARREN</b>	0	0	0	3	0	218
<b>WASHINGTON</b>	3	0	0	0	0	106
<b>WATAUGA</b>	0	0	0	0	0	1957
<b>WAYNE</b>	1	7	0	0	4	1347
<b>WILKES</b>	14	0	0	0	4	701
<b>WILSON</b>	0	0	0	0	0	978
<b>YADKIN</b>	0	8	0	0	2	370
<b>YANCEY</b>	1	0	0	1	0	198
<b>Total</b>	979	184	3	176	269	134815

Table 19. March & November 2024 SDR Voting Verification by County. Tabulated from “NCSBE\_003097 - 2025-02-06 litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV” merged with the public absentee file “absentee\_20240305.csv” and “absentee\_20241105.csv”.

143. To summarize, the verification step in same-day registration is consequential. Individuals who attempt to vote via same-day registration but who do not have their registration verified typically do not end up having a vote counted in that election. Further, the notice-and-cure process implemented in 2024 was not effective in general, and it was especially ineffective for youth voters. This, combined with the prevalence of same-day registration among youth voters,

implies that SB 747, even as applied in 2024, will result in eligible youth voters not having their ballots accepted or counted.

## **IX. CONCLUSION**

144. SB 747 affects modes of voting and registration that are increasingly common, and the effects of SB 747 on voter registration are likely to be most heavily felt by youth voters.

145. Early voting is widely used in both primary and general elections, and the use of early voting is becoming more common over time. In the November 2024 general election, 4.2 million North Carolinians voted early. This was 73.87% of the votes cast.

146. Over 100,000 North Carolinians voted via same-day registration in the 2016, 2020, and 2024 general elections, with over 130,000 same-day registrants in 2024.

147. Youth voters (voters under the age of 26) are overwhelmingly more likely to take advantage of same-day registration than are voters in other age groups, and youth voters have the highest number of same-day registrants in each election from 2016 to 2024 on an absolute basis. This is the case even though youth voters use early voting—the period in which same-day registration is available—at lower rates than the voter population overall and the overall number of youth registrants is smaller than that of any other age group.

148. For example, youth voters are always at least 1.7 times as likely to utilize same-day registration in a given election than voters overall; on occasion, such as in the 2018 primary election, youth voters used same-day registration at rates more than 10 times higher than voters overall.

149. In any given election, youth voters make up the largest age group of same-day registrants—typically between about 30% and 40% of same-day registrants. Put another way, in

any given election a randomly selected same-day registrant is more likely to be a member of the under-26 age group than any other age group.

150. The second mailer in the pre-SB-747 verification system played an important role in verifying voter registrations. Over the past 15 plus years, county boards sent nearly 110,000 second mailers after an initial failed mail verification and nearly 60,000 North Carolina voters relied on that second mail verification step to successfully register to vote.

151. Additionally, analysis of the voter file and provisional voter data indicates that many same-day registrants who fail mail verification are later casting provisional ballots or re-registering at the same address where they initially failed verification, providing evidence that these voters are still having their registrations denied erroneously.

152. Individuals under the age of 26 are the largest group of voters who had a second mailer sent or who rely on post-change-of-address forwarding. Nearly half of the individuals who were verified on a second mailer were youth voters, and, since 2010, the second mailer was responsible for over 26,000 verifications of youth voter registrations. If the second mailer were not available, it is almost certain that these individuals would have failed verification and thus had their registration denied.

153. Those under 26 years of age are disproportionately more likely to fail even the two-mailer verification process than those in older age groups. The number of individuals under 26 with failed mail verifications would be even larger without the use of a second mailer given the rates at which individuals under 26 use that second mailer to verify.

154. Taken together, these facts indicate that the mail verification process is a relatively difficult process for youth voters to successfully navigate, and that SB 747 is likely to exacerbate those difficulties.

155. Among individuals who live at an address with more than 25 attempted voter registrations, those who failed the first mailer are approximately 8 times more likely to reside at a college address (47.92% of those failing the first mailer) than are new registrants at such high-density addresses overall (6.00%).

156. The notice-and-cure process that was implemented for elections in 2024 was not effective for youth voters. The fraction of youth voters who successfully made use of the notice and cure process was lower than for any other age group. For example, 14% of youth voters successfully cured their registration in the 2024 general election, compared to 30% of voters 66 and older who successfully cured their registrations.


157. Overall, SB 747 will likely result in disproportionate numbers of failed voter registration verifications for youth voters—both relative to how those youth voters would have fared in the pre-SB-747 two-mailer verification process and compared to how other age groups will likely fare under SB 747. Given the historical trends, SB 747 is likely to disenfranchise people who would have been able to successfully register and vote under the pre-SB-747 law.

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158. The conclusions in this Report are based upon the facts and information available to me as of the time of its drafting. I reserve the right to amend and supplement the opinions expressed in this Report in light of additional facts or information brought to my attention concerning this matter.

159. Pursuant to 28 U.S.C. § 1746(2), I declare under penalty of perjury that the foregoing is true and correct in substance and in fact to the best of my knowledge and belief.

Executed on: March 5, 2025

  
Kevin M. Quinn, Ph.D.

## Appendix A

### Curriculum Vitae

Kevin M. Quinn

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#### Academic Positions

Charles Howard Candler Professor of Law, Emory University, (2023 – present).  
Professor of Quantitative Theory & Methods, Emory University, (2023 – present).  
Professor, Department of Political Science, University of Michigan – Ann Arbor, (2017 – 2023).  
Professor (by courtesy), Department of Statistics, University of Michigan – Ann Arbor, (2018 – 2023).  
Professor of Law (by courtesy), University of Michigan – Ann Arbor, (2023 – 2023).  
Research Professor, Michigan Institute for Data Science (MIDAS), University of Michigan – Ann Arbor, (2017 – 2023).  
Faculty Associate, Center for Political Studies, University of Michigan – Ann Arbor, (2017 – 2023).  
Professor of Law, UC Berkeley School of Law, (2009 – 2017).  
Associate Professor (untenured), Department of Government, Harvard University, (2007 – 2009).  
Fellow, Center for Advanced Study in the Behavioral Sciences, Palo Alto, CA, (2006 – 2007).  
Assistant Professor, Department of Government, Harvard University, (2003 – 2007).  
Assistant Professor, Department of Political Science, University of Washington, (2000 – 2003).  
Adjunct Assistant Professor, Department of Statistics, University of Washington, (2000 – 2003).  
Core Member, Center for Statistics and the Social Sciences, University of Washington, (2000 – 2003).  
Visiting Research Scholar, Center for Basic Research in the Social Sciences, Harvard University, (1999 – 2000).

#### Education

Ph.D., Washington University in St. Louis, 1999, Political Science.  
A.M., Washington University in St. Louis, 1994, Political Science.  
B.A., The Johns Hopkins University, 1992, Major: Political Science.



## Grants

Co-Principal Investigator (with Marisa Abrajano and Christopher Elemendorf), National Science Foundation Grants SES 16-59922, SES 17-62420, *Collaborative Research: Measuring Apparent Race and Ethnicity with Applications to the Study of Discrimination* (\$397,036 total).

Co-Principal Investigator (with Robert Franzese), National Science Foundation Grant SES 13-24159, *Workshop: Support for Conferences and Mentoring of Underrepresented Groups in Political Methodology*. (\$307,722 total).

Co-Principal Investigator (with Daniel Ho), National Science Foundation Grant SES 07-51834, *The Third Branch in the Fourth Estate: The Media's Role in the Diffusion of Legal Knowledge*. (\$213,000 total).

Co-Principal Investigator (with Steven Abney, Michael Colaresi, Burt Monroe, and Dragomir Radev), National Science Foundation Grant BCS 05-27513, *DHB: The Dynamics of Political Representation and Political Rhetoric*. (\$749,724 total).

Co-Principal Investigator (with Andrew Martin), National Science Foundation Grants SES 03-50613 and SES 03-50646, *Collaborative Research: A Computational Environment for Bayesian Inference in the Social Sciences*. (\$240,010 total).

Co-Principal Investigator (with Andrew Martin), National Science Foundation Grants SES 01-36679 and SES 01-35855, *Collaborative Research: The Dimensions of Supreme Court Decision Making, 1946-2000*. (\$94,661 total).

Co-Principal Investigator (with Michael Hechter and Erik Wibbels), University of Washington Center for Statistics and the Social Sciences Seed Grant, *Measuring State Strength*. (\$25,529).

Co-Principal Investigator (with Andrew Martin), Washington University Weidenbaum Center Small Research Grant, *The Dynamics of Supreme Court Decision Making, 1946-2000*. (\$9,700).

Harvard University Clark Fund. (\$5,876).

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*Reviews, Notes, and Miscellaneous*

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- Quinn, Kevin M. 1999. Review of *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. by Gary W. Cox. *Comparative Political Studies*, 32: 648-651.
- Martin, Andrew D., and Kevin M. Quinn. 1996. "A Review of Discrete Optimization Heuristics." *The Political Methodologist*. 7: 6-10.

*Book Chapters*

- Epstein, Lee; Andrew D. Martin; and Kevin M. Quinn. 2024. “Measuring Political Preferences.” In *The Oxford Handbook of Comparative Judicial Behavior*. Lee Epstein, Gunnar Grendstad, Urska Sadl, & Keren Weinshall. (eds.). Oxford: Oxford University Press.
- Epstein, Lee; Andrew D. Martin; Kevin M. Quinn; and Jeffrey A. Segal. 2019. “Politics and the Legal System.” In *The Oxford Handbook of Public Choice*. Roger D. Congleton, Bernard Grofman, and Stefan Voigt (eds.). Oxford: Oxford University Press.
- Epstein, Lee; Andrew D. Martin; Kevin M. Quinn; and Jeffrey A. Segal. 2012. “Ideology and the Study of Judicial Behavior.” In *Ideology, Psychology, and Law*. John Hanson (ed.). Oxford: Oxford University Press.
- Quinn, Kevin. 2004. “Ecological Inference in the Presence of Temporal Dependence.” In *Ecological Inference: New Methodological Strategies*. Gary King, Ori Rosen, and Martin A. Tanner (eds.). New York: Cambridge University Press.

*Software*

- Glynn, Adam N. and Kevin M. Quinn. CausalGAM, version 0.1-1 (an R package for the estimation of causal effects with generalized additive models).  
URL: <http://cran.r-project.org/web/packages/CausalGAM/index.html>.
- Greiner, D. James, Paul Baines, and Kevin M. Quinn. RxCEcolInf, version 0.1-1 (an R package for ecological inference in arbitrary two-way tables).  
URL: <http://cran.r-project.org/web/packages/RxCEcolInf/index.html>.
- Quinn, Kevin M. SimpleTable, version 0.1-1 (an R package for Bayesian inference and sensitivity analysis for causal effects from  $2 \times 2$  and  $2 \times 2 \times K$  tables in the presence of unmeasured confounding).  
URL: <http://cran.r-project.org/web/packages/SimpleTable/index.html>.
- Martin, Andrew D., Kevin M. Quinn and Jong Hee Park. MCMCpack, version 1.3-4 (an R package for Markov chain Monte Carlo).  
URL: <http://mcmcpack.wustl.edu>.
- Quinn, Kevin M. and Daniel E. Ho. Ratings, version 0.1-1 (an R package for model-based figures of ratings data).  
URL: <http://cran.r-project.org/web/packages/Ratings/index.html>.
- Martin, Andrew D., Kevin M. Quinn, and Daniel Pemstein. Scythe Statistical Library, release 1.0.3 (an open source C++ library for statistical computation).  
URL: <http://scythe.wustl.edu>.

**Honors**

- Senior Fellow, University of Michigan Society of Fellows, 2022-2026 (resigned spring 2023).
- Elected Fellow of the Society for Political Methodology 2018.
- 2016 Law & Courts Lasting Contribution Award for “Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999.” *Political Analysis*. 10: 134-153 (with Andrew D. Martin).
- 2013 Society for Political Methodology Statistical Software Award for MCMCpack (with Andrew D. Martin and Jong Hee Park).

Center for Advanced Studies of the Ludwig-Maximilians-Universität München Visiting Fellowship (June 2013).

2010 Robert H. Durr Award for the best paper applying quantitative methods to a substantive problem in political science for “Can Voter ID Laws Be Administered in a Race-Neutral Manner? Evidence from the City of Boston in 2008” (with Rachael V. Cobb and D. James Greiner).

2008 Harold Gosnell Prize for best work in political methodology presented at any political science conference during 2007-2008 for “What Can Be Learned from a Simple Table? Bayesian Inference and Sensitivity Analysis for Causal Effects from  $2 \times 2$  and  $2 \times 2 \times K$  Tables in the Presence of Unmeasured Confounding”.

Searle Visiting Fellow, Northwestern University School of Law (Spring, 2008).

2006 Harold Gosnell Prize for best work in political methodology presented at any political science conference during 2005-2006 for “An Automated Method of Topic-Coding Legislative Speech Over Time with Application to the 105th-108th U.S. Senate.” (with Burt L. Monroe, Michael Colaresi, Michael H. Crespin, and Dragomir R. Radev).

Center for Advanced Study in the Behavioral Sciences Residential Fellowship (2006-2007)

Inclusion in Oxford’s Centenary Celebration Volume of 100 seminal papers in Oxford journals for “Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the US. Supreme Court, 1953-1999” from *Political Analysis*.

2001 Harold Gosnell Prize for best work in political methodology presented at any political science conference during 2000-2001 for “Bayesian Learning about Ideal Points of U.S. Supreme Court Justices, 1953-1999.” (with Andrew D. Martin).

Program on Human Security Research Scholar. (2000 – 2001). Center for Basic Research in the Social Sciences. Harvard University.

Center in Political Economy Post-Doctoral Fellow. (2000 – 2001). Washington University in St. Louis.

Dean’s Dissertation Fellowship (1998 – 1999). Washington University in St. Louis.

### Short Courses

“The Spatial Model of Voting: Theory and Empirics.” Center for the Study of Law and Society Methodology Workshop, UC Berkeley, November 16, 2012.

“Interpreting Treatment Effects.” Summer Workshop on Research Design for Causal Inference, Northwestern University, August 16-20, 2010.

“Operationalization of Spatial Models.” Empirical Implications of Theoretical Models (EITM) Summer Institute, Universität Mannheim, July 7-10, 2009.

“Operationalization of Spatial Models.” Empirical Implications of Theoretical Models (EITM) Summer Institute, Washington University in St. Louis, June 9-13, 2003; June 23-27, 2005; June 23-26, 2006.

“An Introduction to Bayesian Inference and Hierarchical Modeling for Political Scientists.” Texas A&M University. September 15, 2001 (rescheduled to May 18, 2002).

### Conference Participation

Annual Meeting of the American Political Science Association

- Political Methodology Division Chair: 2005.
- Paper Presenter: 2019, 2015-2014, 2011-2005, 2003, 2001-2000, 1998-1996.



- Discussant: 2009-2007, 2004, 2001-2000, 1997.
- Panel Chair: 2019, 2015, 2012.

Annual Meeting of the Midwest Political Science Association

- Political Methodology Division Chair: 2007.
- Paper Presenter: 2015-2014, 2009-2006, 2004, 2002-2000, 1998-1995.
- Discussant: 2005-2004, 2002.
- Panel Chair: 2005, 2002, 2000.

Annual Meeting of the Society for Political Methodology

- Conference Co-organizer: 2002.
- Member, Program Committee: 2015-2014, 2007, 2002.
- Paper Presenter: 2015, 2007-2004, 2001.
- Discussant: 2013-2012, 2004, 2001, 1998.
- Panel Chair: 2020.

Annual Conference on Empirical Legal Studies

- Member, Conference Program Committee: 2014.
- Paper Presenter: 2014, 2010-2008.
- Discussant: 2019, 2014, 2012, 2009, 2007.
- Panel Chair: 2009.

Annual New Directions in Analyzing Text as Data Conference

- Conference Co-organizer: (2020, postponed to 2021).

Annual Meeting of the Association of American Law Schools

- Chair, Section on Law and the Social Sciences: 2011.
- Chair-Elect, Section on Law and the Social Sciences: 2010.

Annual Asian Political Methodology Conference

- Invited Speaker, 2015.

Annual Meeting of the Law and Society Association

- Roundtable Participant: 2005.
- Paper Presenter: 2002.

Joint Statistical Meetings

- Paper Presenter: 2005.

Annual General Conference of the European Political Science Association

- Panel Chair: 2014.
- Paper Presenter: 2017, 2015-2014, 2012.

UseR!: The R User Conference

- Paper Presenter: 2006, 2004.

**Teaching Experience**

Professor (2023 – present), Emory University

Courses Taught:

- QTM 210 Probability and Statistics (Fall 2023, Fall 2024)
- LAW 685 / QTM 385 Data Science and the Law (Spring 2025)
- LAW 734 Analytical Methods for Lawyers (Spring 2024)

Professor (2017 – 2023), University of Michigan

Courses Taught:

- POLSCI 699 Statistical Methods in Political Research II (Winter 2020, 2021, 2022, Graduate)
- POLSCI 688 Selected Topic: Causal Inference I (Winter 2021, Fall 2021, Graduate)
- POLSCI 688 Selected Topic: Causal Inference II (Winter 2022, Graduate)
- POLSCI 688 Selected Topic: Seminar on Judicial Politics (Winter 2018, 2021, Graduate)
- POLSCI 688 Selected Topic: Bayesian Inference for the Social Sciences (Winter 2018, Graduate)
- POLSCI 599 Statistical Methods in Political Research I (Fall 2022, Graduate)
- POLSCI 496 Seminar on American Government: Judicial Decision Making (Fall 2017, Undergraduate)

Professor (2009 – 2017), UC Berkeley School of Law

Courses Taught:

- LAW 201 Torts (Spring 2017)
- LAW 209.3 Introductory Statistics (Fall 2013, 2014, 2015, 2016, Graduate)
- LAW 209.3 Quantitative Methods I (Spring 2010, Fall 2010, Graduate)
- LAW 209.32 Intermediate Statistics (Spring 2012, 2013, 2014)
- LAW 209.6 Topics in Quantitative Methods (Causal Inference) (Spring 2010, Graduate)
- LAW 219.7 Judicial Decision Making (Spring 2011, 2012, Fall 2012, 2015 Graduate)
- LAW 226.6 Political Economy of Public Law (Spring 2016, Graduate)
- LAW 241.2 E-Discovery (Spring 2014, Spring 2016, Graduate)
- LAW 244.4 Litigation and Statistics (Fall 2015, Graduate)
- LS 138 The Supreme Court and Public Policy (Fall 2011, Spring 2013, Fall 2014, Undergraduate)

Associate Professor (2007 – 2009), Assistant Professor (2003 – 2007), Harvard University

Courses Taught:

- GOV 90bc Courts and Social Change (Spring 2006, 2008, Undergraduate)
- GOV 1000 Quantitative Methods for Political Science I (Fall 2004, Graduate)
- GOV 2000 Quantitative Methods for Political Science I (Fall 2005, Graduate)
- GOV 2000 Quantitative Methods for Political Science II (Spring 2004, Graduate)
- GOV 2002 Topics in Political Methodology (Fall 2007, Graduate)
- GOV 2003 Bayesian Hierarchical Modeling (Spring 2004, 2005, and 2008, Graduate)
- GOV 2453 / LAW 35255A Practical and Theoretical Regulation of Voting (Fall 2008, Graduate)

Assistant Professor (2000 – 2003), University of Washington

Courses Taught:

- POL 447 Comparative Democratic Institutions (Winter 2001, Undergraduate/Graduate)



- POL 492 Quantitative Political Methodology (Winter 2003, Graduate)
- CSSS/POL 494 Advanced Quantitative Political Methodology (Spring 2002, Graduate)
- CSSS/SOC/STAT 536 Logistic Regression and Loglinear Modeling for the Social Sciences (Fall 2000, 2001, & 2002, Graduate)
- CSSS/POL/STAT 560 Hierarchical Modeling for the Social Sciences (Winter 2001 & 2002, Graduate)

#### **Dissertation and Thesis Advising**

Member, Ph.D. Dissertation Committee:

- Daniel Ho (Government, Harvard University, completed 2004)
- Anton Westveld (Statistics, University of Washington, completed 2006)
- D. James Greiner (Statistics, Harvard University, completed 2007)
- Olivia Lau (Government, Harvard University, completed 2008)
- Ryan Moore (Government, Harvard University, completed 2008)
- Michael Kellermann (Government, Harvard University, completed 2009)
- Andrew Eggers (Government, Harvard University, completed 2010)
- Ben Goodrich (Government, Harvard University, completed 2010)
- Justin Grimmer (Government, Harvard University, completed 2010)
- Michael Salamone (Political Science, UC Berkeley, completed 2011)
- Devin Caughey (Political Science, UC Berkeley, completed 2012)
- Brian Gawalt (Electrical Engineering, UC Berkeley, completed 2012)
- Maya Sen (Government, Harvard University, completed 2012)
- Jason Anastasopoulos (Political Science, UC Berkeley, completed 2013)
- Michael Higgins (Statistics, UC Berkeley, completed 2013)
- Douglas Spencer (Jurisprudence and Social Policy, UC Berkeley, completed 2013)
- Roberto Mancilla (J.S.D., UC Berkeley, completed 2014)
- Stephen Goggin (Political Science, completed 2016)
- Ryan Hubert (Political Science, UC Berkeley, completed 2016)
- Janna Rezaee (Political Science, UC Berkeley, completed 2016)
- Michael Dougal (Political Science, UC Berkeley, completed 2017)
- Benjamin Chen (Jurisprudence and Social Policy, UC Berkeley, completed 2017)
- Ryan Copus (Jurisprudence and Social Policy, UC Berkeley, completed 2017, Co-chair)
- Joy Milligan (Jurisprudence and Social Policy, UC Berkeley, completed 2018, Co-chair)
- Julian Nyarko (Jurisprudence and Social Policy, UC Berkeley, completed 2018, Co-chair)
- James Phillips (Jurisprudence and Social Policy, UC Berkeley, completed 2018)
- Diogo Ferrari, (Political Science, University of Michigan, completed 2019)
- Mary Hoopes (Jurisprudence and Social Policy, UC Berkeley, completed 2020, Co-chair)
- Kevin Cope, (Political Science, University of Michigan, completed 2020)
- Kevin McAlister, (Political Science, University of Michigan, completed 2020, Co-chair)
- Jerry Qiushi Yu (Political Science, University of Michigan, completed 2021, Chair)
- Patrick Wu (Political Science, University of Michigan, completed 2021)
- Nuannuan Xiang, (Political Science, University of Michigan, completed 2022)

- Roya Talibova (Political Science, University of Michigan, in completed 2022)
- ByungKoo Kim (Political Science, University of Michigan, completed 2023, Co-chair)
- Sinead Redmond, (Political Science, University of Michigan, completed 2023)
- Timothy Jones (Political Science, University of Michigan, completed 2023)
- Marty Davidson (Political Science, University of Michigan, completed 2023)
- Guoer Liu (Political Science, University of Michigan, completed 2024)
- Saki Kuzushima (Political Science, University of Michigan, completed 2024, Co-Chair)
- Brandon Romero (Political Science, University of Michigan, in progress)
- Derek Lief (Business and Political Science, University of Michigan, in progress)
- Benjamin Goehring (Political Science, University of Michigan, in progress)
- Martin Macias Medellin (Political Science, University of Michigan, in progress)
- Sam England (Political Science, Emory University, in progress)

Chair, Undergraduate Honors Thesis:

- Rob Sneckenberg (Government, Harvard University)
- Cristina Henriquez (Legal Studies, UC Berkeley)
- Mark Sheppard (Legal Studies, UC Berkeley)
- Haylee Bernal (Legal Studies, UC Berkeley)
- Andrew Gove (Legal Studies, UC Berkeley)
- Brandon Stras (Political Science, University of Michigan)
- Henry Taylor (Political Science, University of Michigan)
- Aya Salim (Political Science, University of Michigan)

Chair, Senior Thesis:

- Timothy Barham (Legal Studies, UC Berkeley)

Chair, LLM Thesis:

- Jörg Bartz (UC Berkeley)

## Service

### *Professional*

Editorial Board Member: *Political Analysis* (2010 – present).

Editorial Board Member: *Journal of Law and Courts* (2024 – present).

Co-Editor: *Journal of Law, Economics, and Organization* (2017 – 2021).

Governing Board Member: Text as Data Association (2015 – 2021).

Editorial Board Member: *Journal of Politics* (2015 – 2020).

Member: Society for Political Methodology Long-Range Planning Committee (2017 – 2018).

Member: Society for Political Methodology Nominations Committee (2016 – 2018).

Member: Society for Political Methodology Poster Award Committee (2019).

Member: APSA Law & Courts Lasting Contribution Award Committee (2017).

President: Society for Political Methodology (2013 – 2015).

Vice-President: Society for Political Methodology (2011 – 2013).

Associate Editor: *Journal of the American Statistical Association, Applications and Case-Studies* (2009 – 2012).

Manuscript Referee: *American Journal of Political Science; American Political Science Review; Annals of Applied Statistics; British Journal of Political Science; Comparative Political Studies; Electoral Studies; European Union Politics; International Organization; Journal of the American Society for Information Science and Technology; Journal of the American Statistical Association; Journal of Empirical Legal Studies; Journal of Law, Economics, and Organization; Journal of Peace Research; Journal of Politics; Journal of Public Administration Research and Theory; Journal of the Royal Statistical Society; Jurimetrics; Law and Social Inquiry; Law and Society Review; Legislative Studies Quarterly; Nature Human Behavior; Policy Studies Journal; Political Analysis; Political Geography; Political Research Quarterly; Political Science Research and Methods; Proceedings of the National Academy of Sciences; Public Choice; Public Opinion Quarterly; Quarterly Journal of Political Science; R News; Review of Economics and Statistics; Science Advances; Sociological Methods and Research; Springer; Statistica Sinica; Statistical Methodology; Studies in Comparative International Development; The American Statistician; Yale University Press.*

Grant Referee: National Science Foundation, National Institutes of Health

Member: Law School Admission Council Grants Subcommittee (2014 – 2015).

Member: APSA Law & Courts Nominating Committee (2012).

Member: Society for Political Methodology Emerging Scholar Award Selection Committee (2010 – 2012).

Member: Executive Committee of the Law and Courts Section of the American Political Science Association (2008 – 2009).

At Large Member: Council of the Political Forecasting Group (2008 – 2009).

Member: Program Committee for the Annual Meeting of the Society for Political Methodology (2007).

Member: Robert H. Durr Award Selection Committee (2002).

Member: POLMETH Editorial Board.

#### *Emory University*

Member: Statistics Faculty Search Committee (Department of Quantitative Theory & Methods), (2024 – 2025).

Member: AI and Legal Tech Initiatives Committee (School of Law), (2024 – 2025).

Member: Graduate Program Committee (Department of Quantitative Theory & Methods), (2023 – 2025).

Member: Provost's AI Ethics-Policy-Regulation-Cluster-Hire Advisory Committee, (2023 – 2024).

Chair: Target of Opportunity Committee (Department of Quantitative Theory & Methods), (2023 – 2024).

Member: Emory University Arts and Humanities Initiative Committee (School of Law), (2023 – 2025)

#### *University of Michigan*

Organizer: Interdisciplinary Seminar in Quantitative Methods, (2019 – present).

Member: Departmental Executive Committee: Department of Political Science, (2020 – 2022).

Member: Graduate Program Reform Committee: Department of Political Science, (2020 – 2021).  
Political Methodology Subfield Coordinator: Department of Political Science, (2018, 2020 – 2021).  
Law and Politics Subfield Coordinator: Department of Political Science, (2022 – 2023, 2017 – 2018).  
Member: MIDAS Faculty Engagement and Recruitment Committee, (2017-2018).  
Member: Quantitative/Computational Social Science Implementation Committee, (2018).  
Member: Data Science Internal Review Committee, (2018).

*University of California Berkeley*

Co-Chair: Faculty Appointments Committee, UC Berkeley School of Law (2015 – 2016).  
Co-Chair: Global Task Force, UC Berkeley School of Law (2015 – 2016).  
Vice-Chair: UC Berkeley Committee on Research (2015 – 2017).  
Member: UC Berkeley Law School Dean Search Committee (2016 – 2017).  
Member: UC Berkeley Committee on Research (2010 – 2017).  
Member: Faculty Appointments Committee, UC Berkeley School of Law (2014 – 2017).  
Member: JSP Admissions Committee (2014 – 2015, 2012 – 2013, 2010 – 2011).  
Member: Ph.D. Programs Committee, UC Berkeley School of Law (2013 – 2014).  
Member: JSP Student Diversity Committee (2013 – 2014).  
Member: Center for the Study of Law and Society Advisory Committee (2009 – 2015).  
Member: Review Committee for Berkeley Empirical Legal Studies Fellowships (2009 – 2015).  
Member: Academic and Degree Program Committee, UC Berkeley School of Law (2010 – 2011).  
Member: JSP Graduate Program Review Committee (2009 – 2011).

**References**

Available upon request

March, 2025

## Appendix B - Additional Materials Relied Upon or Considered<sup>1</sup>

- **Confidential Data Productions**

- 2025-02-01 Data Production
  - 2025-02-01 litigation\_ticket\_124972\_1stVFY\_status\_list.txt
  - 2025-02-01 litigation\_ticket\_124972\_1stVFY\_voter\_list.txt
  - 2025-02-01 litigation\_ticket\_124972\_Denied\_status\_list.txt
  - 2025-02-01 litigation\_ticket\_124972\_Denied\_voter\_list.txt
  - 2025-02-01  
litigation\_ticket\_124972\_Voter\_Other\_Address\_Changes\_1stVerify.csv
  - 2025-02-01  
litigation\_ticket\_124972\_Voter\_Other\_Address\_Changes\_Denied.csv
  - 2025-02-01  
litigation\_ticket\_124972\_Voter\_Reg\_Address\_Changes\_1stVerify.csv
  - 2025-02-01  
litigation\_ticket\_124972\_Voter\_Reg\_Address\_Changes\_Denied.csv
- 2025-02-19 Data Production
  - NCSBE\_003097 - 2025-02-06  
litigation\_ticket\_124972\_SDR\_Undeliverable\_Info\_2024\_Elections.CSV
  - NCSBE\_003098 - 2025-02-06  
litigation\_ticket\_124972\_SDR\_Undeliverable\_Verification\_History\_2024.  
CSV
  - NCSBE\_003099 – 20250214\_VRF\_\_STATE\_TABLE.csv

- **Public Data:**

- Voter Snapshots (Linked from <https://dl.ncsbe.gov/?prefix=data/Snapshots/> )
  - VR\_Snapshot\_20140506.zip
  - VR\_Snapshot\_20141104.zip
  - VR\_Snapshot\_20160315.zip
  - VR\_Snapshot\_20161108.zip
  - VR\_Snapshot\_20180508.zip
  - VR\_Snapshot\_20181106.zip
  - VR\_Snapshot\_20200303.zip
  - VR\_Snapshot\_20201103.zip
  - VR\_Snapshot\_20220517.zip
  - VR\_Snapshot\_20221108.zip
  - VR\_Snapshot\_20240305.zip
  - VR\_Snapshot\_20241105.zip
  - VR\_Snapshot\_20100101.zip
  - VR\_Snapshot\_20110101.zip
  - VR\_Snapshot\_20120101.zip
  - VR\_Snapshot\_20130101.zip
  - VR\_Snapshot\_20140101.zip
  - VR\_Snapshot\_20150101.zip

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<sup>1</sup> This list is a supplement to the facts, data and other sources cited within the Report itself.

- VR\_Snapshot\_20160101.zip
- VR\_Snapshot\_20170101.zip
- VR\_Snapshot\_20180101.zip
- VR\_Snapshot\_20190101.zip
- VR\_Snapshot\_20200101.zip
- VR\_Snapshot\_20210101.zip
- VR\_Snapshot\_20220101.zip
- VR\_Snapshot\_20230101.zip
- VR\_Snapshot\_20240101.zip
- VR\_Snapshot\_20250101.zip
- Absentee Files (Linked from <https://dl.ncsbe.gov/?prefix=ENRS/> )
  - absentee\_20140506.txt
  - absentee\_20141104.csv
  - absentee\_20160315.csv
  - absentee\_20161108.csv
  - absentee\_20170912.csv
  - absentee\_20171010.csv
  - absentee\_20171107.csv
  - absentee\_20180508.csv
  - absentee\_20180626.csv
  - absentee\_20181106.csv
  - absentee\_20190430.csv
  - absentee\_20190514.csv
  - absentee\_20190709.csv
  - absentee\_20190910.csv
  - absentee\_20191008.csv
  - absentee\_20191105.csv
  - absentee\_20200303.csv
  - absentee\_20200623.csv
  - absentee\_20201103.csv
  - absentee\_20211005.csv
  - absentee\_20211102.csv
  - absentee\_20220517.csv
  - absentee\_20220726.csv
  - absentee\_20221108.csv
  - absentee\_20221206.csv
  - absentee\_20230307.csv
  - absentee\_20230912.csv
  - absentee\_20231010.csv
  - absentee\_20231107.csv
  - absentee\_20240305.csv
  - absentee\_20240514.csv
  - absentee\_20241105.csv
- Provisional (Linked from <https://dl.ncsbe.gov/?prefix=ENRS/> )
  - provisional\_20100504.txt
  - provisional\_20100622.txt

- provisional\_20101102.txt
- provisional\_20120508.txt
- provisional\_20120717.txt
- provisional\_20121106.txt
- provisional\_20131105.txt
- provisional\_20140506.txt
- provisional\_20140715.txt
- provisional\_20141104.txt
- provisional\_20150915.txt
- provisional\_20151006.txt
- provisional\_20151103.txt
- provisional\_20160315.txt
- provisional\_20160607.txt
- provisional\_20161108.txt
- provisional\_20170912.txt
- provisional\_20171010.txt
- provisional\_20171107.txt
- provisional\_20180508.txt
- provisional\_20180626.txt
- provisional\_20181106.txt
- provisional\_20190430.txt
- provisional\_20190514.txt
- provisional\_20190709.txt
- provisional\_20190910.txt
- provisional\_20191008.txt
- provisional\_20191105.txt
- provisional\_20200303.txt
- provisional\_20200623.txt
- provisional\_20201103.txt
- provisional\_20211005.txt
- provisional\_20211102.txt
- provisional\_20220517.txt
- provisional\_20220726.txt
- provisional\_20221108.txt
- provisional\_20221206.txt
- provisional\_20230307.txt
- provisional\_20230912.txt
- provisional\_20231010.txt
- provisional\_20231107.txt
- provisional\_20240305.txt
- provisional\_20240514.txt
- provisional\_20241105.txt
- Public Voter Files (Linked from <https://dl.ncsbe.gov/?prefix=data/>)
  - ncvhis\_Statewide.txt (created 2025-02-23, retrieved 2025-02-26)
  - ncvoter\_Statewide.txt (created 2025-03-02, retrieved 2025-03-03)

- **Bates Stamped Materials**

- NCSBE\_000433
- NCSBE\_000434
- NCSBE\_000435
- NCSBE\_000479
- NCSBE\_000480.xlsx – Field\_Names\_Headers\_Lookup\_Tables for NCSBE
- NCSBE\_003081-5
- NCSBE\_003087-9

- **Other Materials**

- NCSBE Field Names –  
[https://s3.amazonaws.com/dl.ncsbe.gov/data/layout\\_ncvoter.txt](https://s3.amazonaws.com/dl.ncsbe.gov/data/layout_ncvoter.txt)
- Complaint, *Democracy N.C., et al. v. Hirsch, et al.*, Case No. 23-878 (M.D.N.C. Oct. 17, 2023)
- Memorandum Opinion and Order, *Voto Latino, et al. v. Hirsch, et al.*, Case No. 23-861 (M.D.N.C. Jan. 21, 2024)
- Testimony of Paul Cox and Parker Holland, 30(b)(6) Representatives of the North Carolina State Board of Elections, February 24 & 25, 2025. [Rough draft transcript]
- State Board of Elections Response to Plaintiffs 3<sup>rd</sup> RFPs, Feb. 18, 2025
- State Board of Elections Response to Legislative Defendants 2<sup>nd</sup> RFPs, Feb. 18, 2025